baby lock®

imagine wave™

Instruction and Reference Guide

Model BLE3ATW

"IMPORTANT SAFETY INSTRUCTIONS"

When using overlock machine, basic safety precautions should always be followed, including the following.

"Read all instructions before using this overlock machine."

DANGER- To reduce the risk of electric shock.

1. The machine should never be left unattended when plugged in. Always unplug this machine from the electrical outlet immediately after using and before cleaning.
2. Always unplug before replacing light bulb. Replace bulb with same type rated 15 watts/110 volts in 110V/120V area. (10 watts 230 volts in 220V/240V area.)

WARNING- To reduce the risk of burns, fire, electric shock, or injury to persons.

1. Do not allow to be used as a toy. Close attention is necessary when the sewing machine is used by or near children.
2. Use this overlock machine only for its intended use as described in this manual. Use only attachments recommended by the manufacturer as contained in this manual.
3. Never operate this overlock machine if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the overlock machine to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.
4. Never operate the overlock machine with any air openings blocked. Keep ventilation openings of the overlock machine and foot controller free from the accumulation of lint, dust, and loose cloth.
5. Never drop or insert any object into any opening.
6. Do not use outdoors.
7. Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
8. To disconnect, turn the main switch to the symbol "O" position which represents off, then remove plug from outlet.
9. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
10. Keep fingers away from all moving parts. Special care is required around the overlock machine needle.
11. Always use the proper needle plate. The wrong needle plate can cause the needle to break.
12. Do not use bent needles.
13. Do not pull or push fabric while stitching. It may deflect the needle(s) causing it to break.
14. Switch the overlock machine to the symbol "O" position when making any adjustments in the needle area, such as threading needle, changing needle, threading looper, or changing presser foot, and the like.
15. Always unplug the overlock machine from the electrical outlet when removing covers, lubricating, or when making any of the user servicing adjustments mentioned in the instruction manual.
16. Keep fingers away from moving parts, especially the area near the blades.

"SAVE THESE INSTRUCTIONS"

"This overlock machine is intended for household use."

Welcome to the Baby Lock Imagine Wave

The Baby Lock Imagine Wave has an exclusive "Thread Delivery System" that eliminates confusing tension adjustments. The Imagine Wave enables you to accomplish a perfect stitch with any type of thread on any type of fabric. You no longer need to guess at the correct tension adjustments.

Your Baby Lock Imagine Wave is a high-quality, dependable machine. It gives you the ability to seam, overcast and trim all in one operation. Fabrics and threads you previously avoided are now a joy to sew because the Baby Lock Imagine Wave handles all varieties with equal ease. With the Baby Lock Imagine Wave your creative options are endless and your time spent serging is more fulfilling and rewarding. With the "Instant Jet-Air Threading", even threading the Imagine Wave is a breeze.

With proper care and maintenance, your Baby Lock Imagine Wave promises years of high-quality, dependable performance and sewing pleasure. Keep this instruction manual as a step-by-step guide to become familiar with your Baby Lock Imagine Wave and expand your sewing horizons.

For additional product information and updates, visit our website at www. babylock. com.

Happy Sewing!

imagine wave™

CONGRATULATIONS

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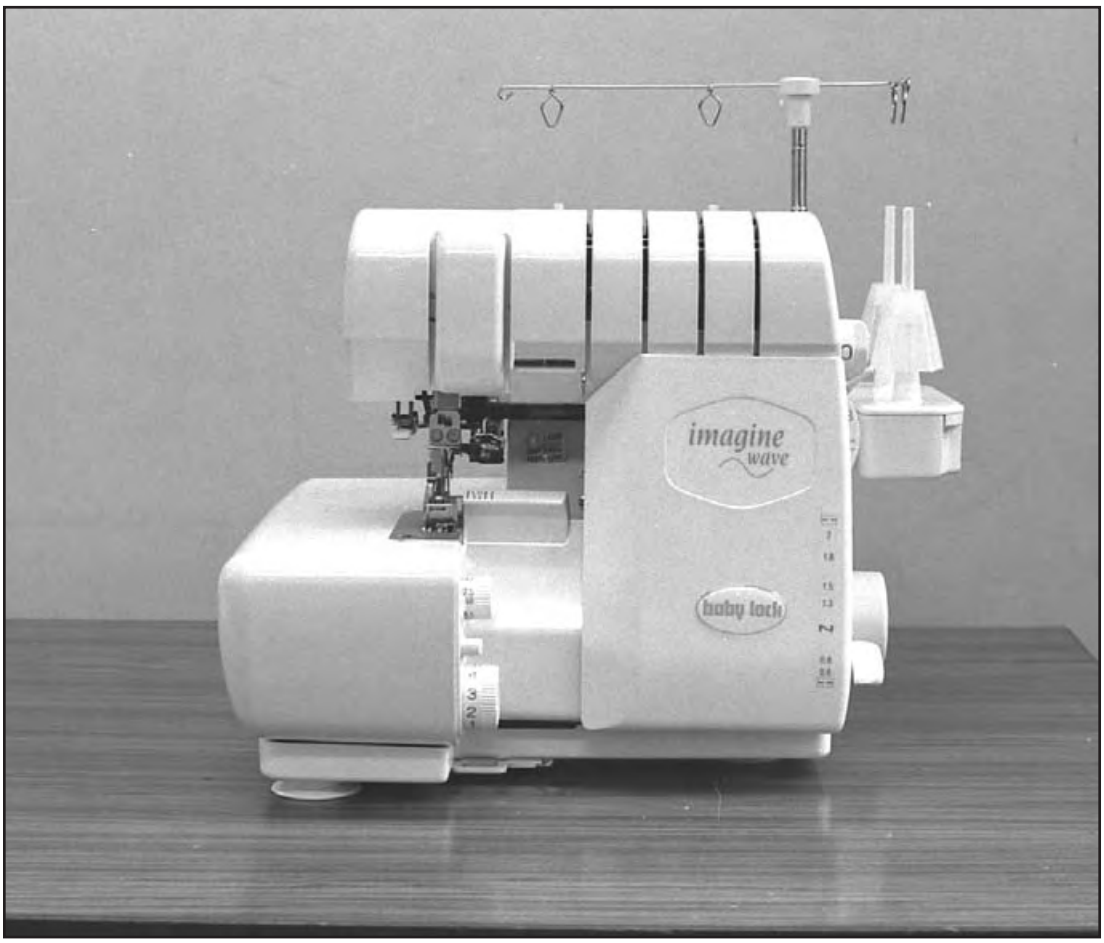
How Your Serger Operates

Sometimes called an overlock machine or overlocker, the serger is different from any conventional sewing machine you have used. Awareness of its simple operation will enable you to become more proficient in its use. Please read all instructions before using your new machine.

Serging is kind of a knitting process that loops two, three or four threads together to create a stitch. Your Baby Lock Imagine Wave operates with one or two needles and one or two "loopers," each carrying a thread, that take the place of a bobbin.

When fabric is placed into the machine, it reaches the feed dogs first. The feed dogs move the fabric along as the cutting blades trim the edge, creating a clean edge to be finished. Then the loopers and needle(s) form the stitch on the fabric edge, supported by one or more parallel "stitch fingers" - Metal prongs that keep the fabric flat. The threads become "locked" over the fabric and the resulting stitches encase the raw edge with thread to prevent fabric raveling.

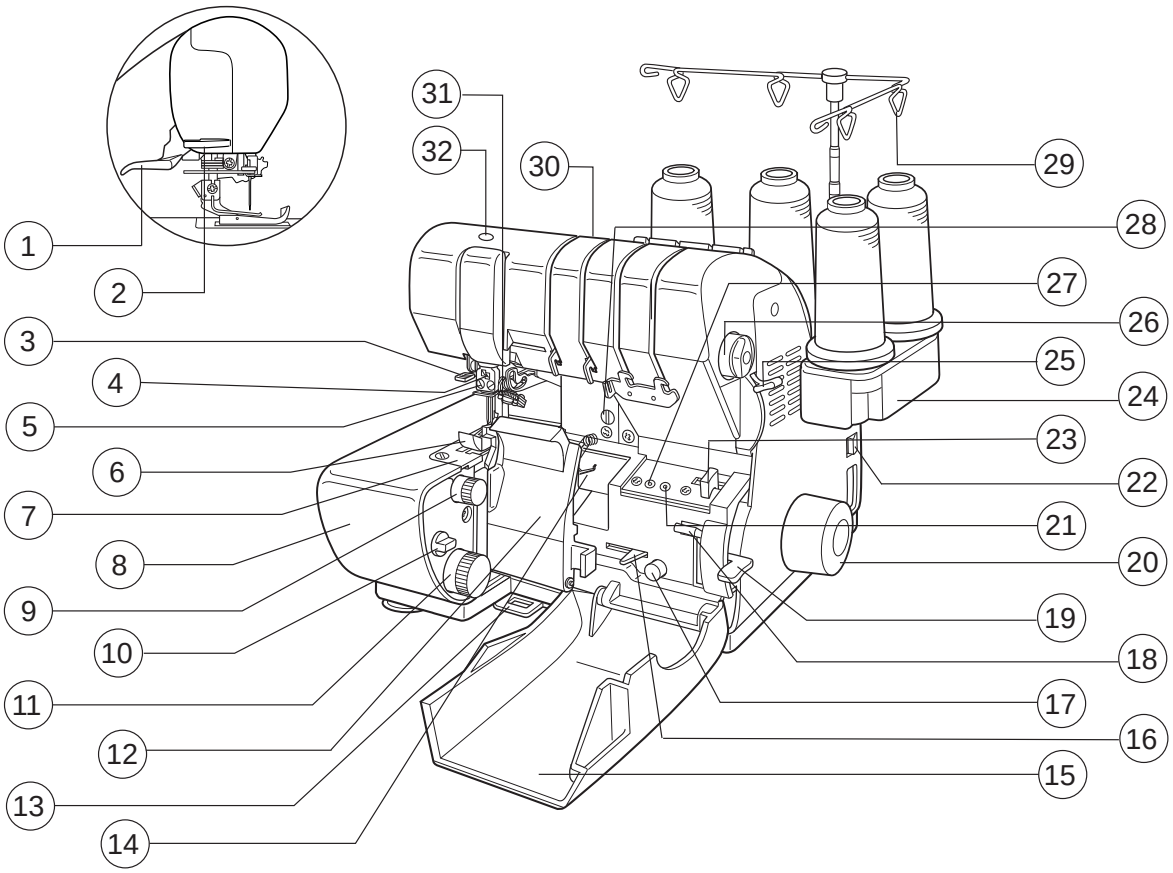
After setting up your machine for the first time, take a few moments to learn how it sews. Before your serger is threaded, turn the handwheel - toward you - and watch the movement and operation of the various parts. Don't bother with fabric at first. It doesn't hurt your serger to stitch without fabric under the presser foot.



Overview of the Imagine Wave

1. Presser foot thread release lever*
2. Thread cutter
3. Needle threader lever
4. Needle height viewing area
5. Needle clamp screw
6. Snap-on presser foot
7. Needle plate
8. Side cover
9. Stitch width adjusting dial
10. Cutting blade lock switch
11. Stitch length/rolled hem adjusting dial
12. Cutting blade cover
13. Needle drop drawer
14. Subsidiary looper
15. Front cover
16. Machine lock button release lever
17. Machine lock button
18. Looper threading lever
19. Differential feed adjusting lever
20. Handwheel
21. Lower looper threading port
22. Power switch
23. Looper threader selector
24. Accessory compartment & spool stand
25. Stitch selector
26. wave selector
27. Upper looper threading port
28. Looper thread fine-tuning screw
29. Telescopic thread guide and antenna
30. Carrying handle
31. Needle threader selector
32. Presser foot pressure adjusting screw

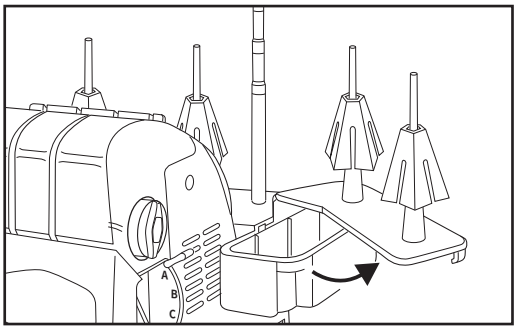
* Raising the presser foot releases all threads.

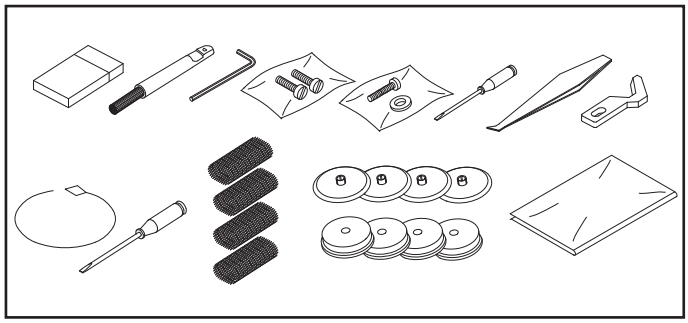


Accessories

Your Baby Lock Imagine Wave serger has a built-in accessory compartment. To open, swing the "lid" on the thread spoolstand to the right to reveal the tray holding some of the accessories listed below. Others may be found in the machine packing materials.

Accessory	Number included	Located in
Instruction manual	1	Packing box
Quick reference threading guide	1	Packing box
Instruction video tape (U.S.A. only)	1	Packing box
Lint brush/needle insert tool	1	Accessory compartment
Needle clamp screw	2	Accessory compartment
Package of assorted sized needles Schmetz or Organ HAx1SP/CR	1	Accessory compartment
Medium screwdriver	1	Accessory compartment
Tweezers	1	Accessory compartment
Upper cutting blade for replacement	1	Accessory compartment
Looper threading tool	1	Accessory packet
Screwdriver	1	Accessory packet
Machine cover	1	Accessory packet
Mounting bolt with washer (U.S.A. only)	1	Accessory packet
Thread nets	4	Accessory packet
Spool caps	4	Accessory packet
Sponge disks	4	Accessory packet
Allen wrench	1	Accessory packet
Cone holders	4	On machine





Needles

Your Baby Lock Imagine serger is set up with 90/14 machine needles, which are suitable for most medium and heavyweight fabrics. For lightweight fabrics, change to a size 75/11 needle. The needle's semi-ball point design is suitable for knits and wovens. Some manufacturers' needles may produce better quality stitches with your Baby Lock than others. For best results, use Schmetz or Organ brand needles - system HAx1SP/CR, and replace them approximately every third project (see page 44).

Thread

All types of thread may be used on your Baby Lock, but 100% long-staple polyester thread, crosswound on a cone, consistently provides the best stitch performance. Because the threads must pass through several thread guides at high speeds, they must be of uniform thickness and high strength with a minimum amount of linting.

Good-quality cotton or cotton-covered polyester threads sew well, though they produce more lint, creating the need to clean the machine more frequently. They work well for overedging and seaming, but they may be too weak or too fuzzy for the rolled edge. Poor grades of these threads can result in frequent fraying, breaking and unbalanced stitches.

Threads of other fiber contents and weights may be used, depending on their strength and thickness. Testing will help you determine how easily they can pass through the thread guides, thread slots, needles and loopers. for more information, see page 46 and 47.

Important Note: For maximum performance of the Baby Lock Imagine Wave, it is recommended to use "100% polyester-long fiber thread". Recommended brands are Maxi-Lock and Metrosene. This thread also performs best when used with many decorative threads for serging specialty decorative techniques.

Optional Accessories

There are optional snap-on specialty feet available for the Imagine. The optional accessories are available at your Baby Lock Dealer.

- Elastic Applicator Foot B5002S01A-E (BLE-EF)
- Blindhem B5002S02A-E (BLE-BLHFS)
- Beading Foot B5002-01A-C-E (BLE-BF)
- Piping Foot (3mm) B5002-02A-C-E (BLE-CF3)
- Piping Foot (5mm) B5002-03A-C-E (BLE-CF5)
- Ruffling Foot B5002-01A-C-E (BLE-RF)
- Lace Applicator Foot B5002S05A-E (BLE-LF)
- Bulb Remover Tool B7525-01A (262011)
- Size 90 Top Stitch Needle (T-90B)

Setting Up Your Imagine Wave

After removing the packing materials from the box, gently lift your Baby Lock serger by gasping the handle provided on the top of the machine. Place the machine on a serger sewing table or any level surface that provides ample work area to the left. Place the foot controller in a pedal stay, if desired, and place it under the sewing table.

Plug the power cord into the machine first, then into a wall outlet. The power switch is located toward the back on the right side of the machine. Always make sure the power is off when the machine is not in use (fig.A).

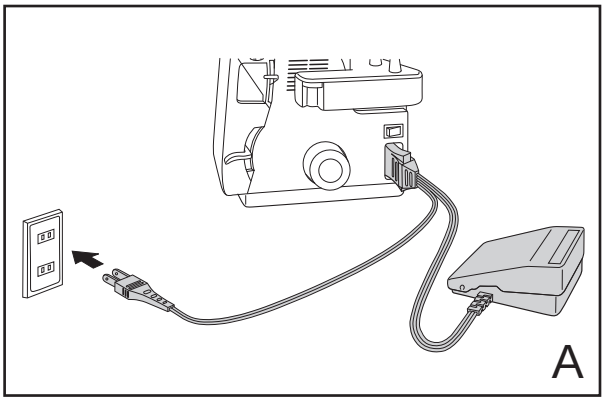
Available foot controller for U.S.A.: Model YC-482, or YC-420W

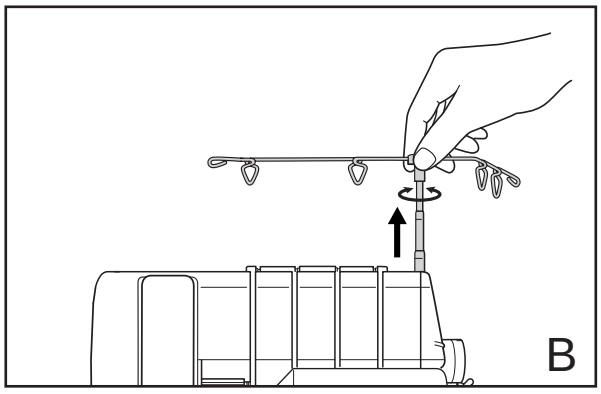
This appliance has a polarized plug (one blade wider than the other). To reduce the risk of electric shock, this plug is intended to fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not modify the plug in any way.

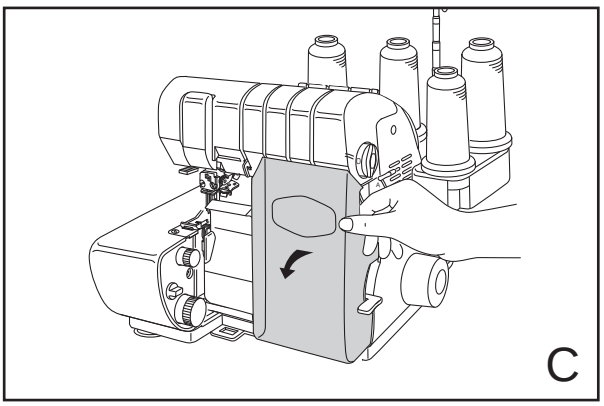
The sewing speed of the machine is determined by the amount of pressure applied to the foot controller. When not in use, do not place anything on the foot controller, or the machine could start inadvertently and the controller or motor could burn out (fig.A).

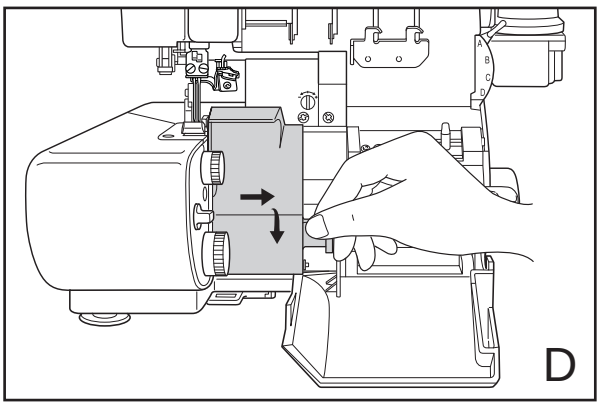
Raise the telescopic thread guide to its highest position of 14". Rotate the shaft to the left and right until each section "clicks" into a locked position (fig.B). The front cover may be opened simply by placing your fingers behind the tab at the right side and pulling toward you (fig.C).

To open the cutting blade cover, place your thumb against the tab, and slide the cover to the right. A slight pull forward will allow the cover to swing down, providing access to the loopers, blades, and thread guides (fig.D).

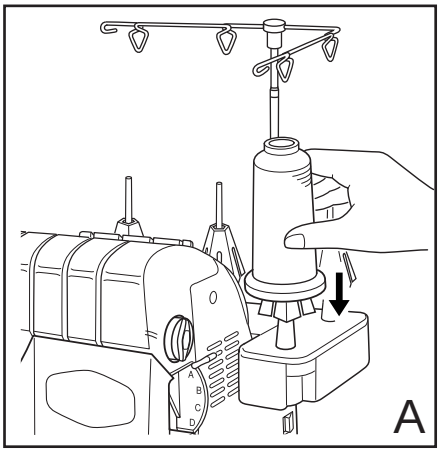






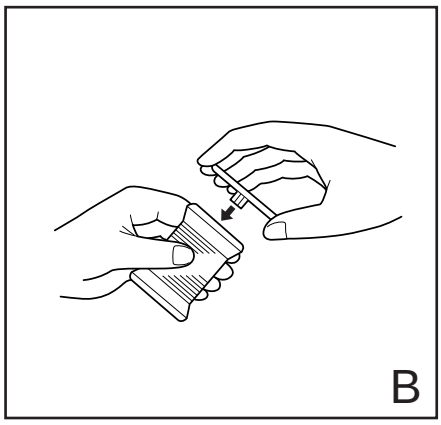


Setting Up Your Imagine Wave



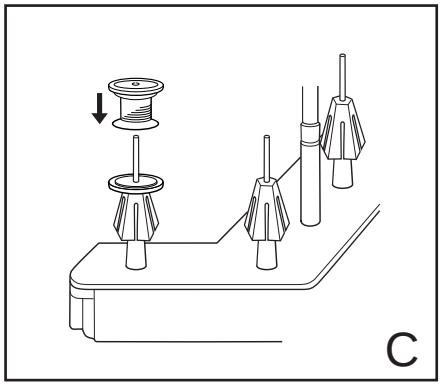
When using threads on cones or king spools place the cone or spool securely over the cone holders furnished on your machine. To avoid bending the thread stand, you may need to place one hand under the stand while positioning the cone. The cone holders prevent the cone or spool from spinning, enabling the thread to feed evenly (fig.A).

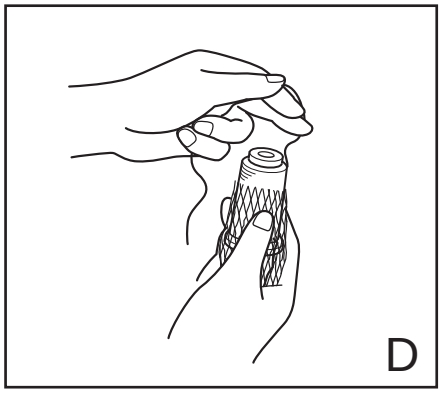
Because threads for the serger feed from the top, standard spool threads can snag on the rough edges of many of these spools. That's why spool caps are furnished with your Imagine Wave to provide a smooth surface that enables the thread to reel off freely. With the spool notch side down, insert a spool cap into the top of the spool (fig.B).

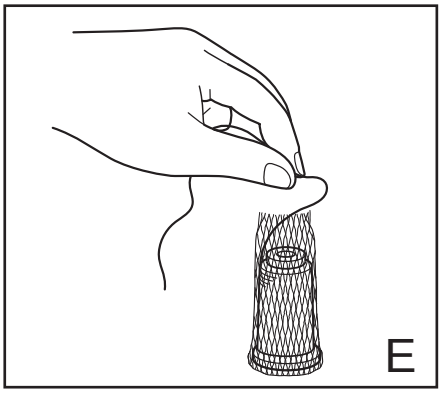


When using standard spool threads on your serger, replace the cone holders with the sponge disks furnished with your machine. These disks hold smaller spools securely and help the thread to reel off properly. With the sponge disk in place, put the capped spool on the spindle (fig.C).

Thread nets may be placed over threads that tend to slip off the bottom of the spool during sewing. Most threads do not require their use, but nets often are necessary with nylon, rayon or silk threads (fig.D). Once it's on the spool, fold the net back on itself, if necessary, to enable the thread to feed smoothly without snagging on the net (fig.E).







Threading Your Imagine Wave

Your Baby Lock Imagine Wave is equipped with an exclusive "Instant Jet-Air Threading System" for fast, easy threading of the upper and lower loopers.
One push of the "Jet-Air" threading lever will automatically thread the loopers. It is no longer necessary to use tweezers for threading the thread guides. If a looper thread breaks or runs out, just re-thread it. There is no need to follow threading sequence.

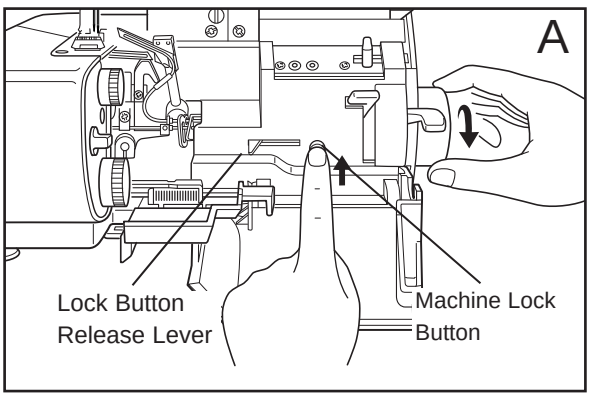
Locked Position for Threading

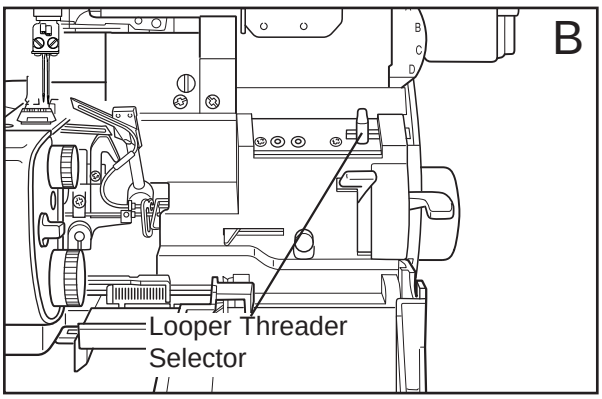
1. Open the front cover.
2. Raise the presser foot to release all threads.
3. Depress the machine lock button firmly. Rotate the machine handwheel slowly toward you until the button "snaps" into the locked position and the lock button release lever moves to the far left (fig.A).

Note: The Imagine Wave must be in the locked position when threading the loopers unless otherwise indicated. The machine in Locked Position also sets the needle position for using the Needle threader. This is also a safety feature when threading as the machine cannot sew while in locked position.

Lower Looper

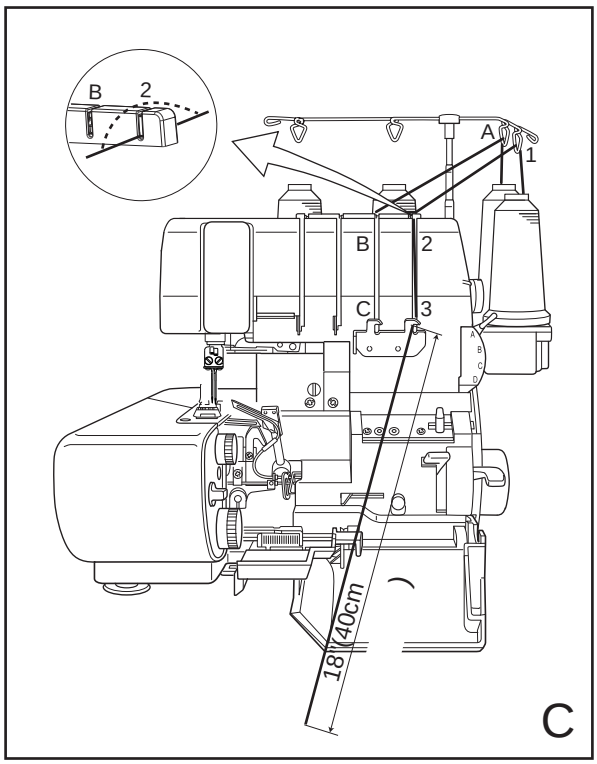
1. With the presser foot up and machine lock button in the locked position (fig. A) . Set the threading port selector lever to "L" for lower looper threading (fig. B).
2. Place the thread cone or spool on the Lower Looper spool pin on the thread stand. Slip the thread into the telescopic antenna thread guide "1" directly above the spool, snap into the thread guide "2" at the top of the machine, through the slot on the front cover. (See fig. C page 11)
3. Pull 18 inches (40cm) of thread through guide "3". Insert the end of the thread into the threading port "L" about 1 inch (2.5cm) . Use tweezers if necessary, to insert the thread end more easily.
4. Depress the looper threading lever (fig. D page 11) . If the thread does not go through the lower looper eye with one push, depress the threading lever again until it does.
5. Clip the thread 4 inches (10cm) from the lower looper eye and leave it hanging loose.
6. Move the lock button release lever to the right.

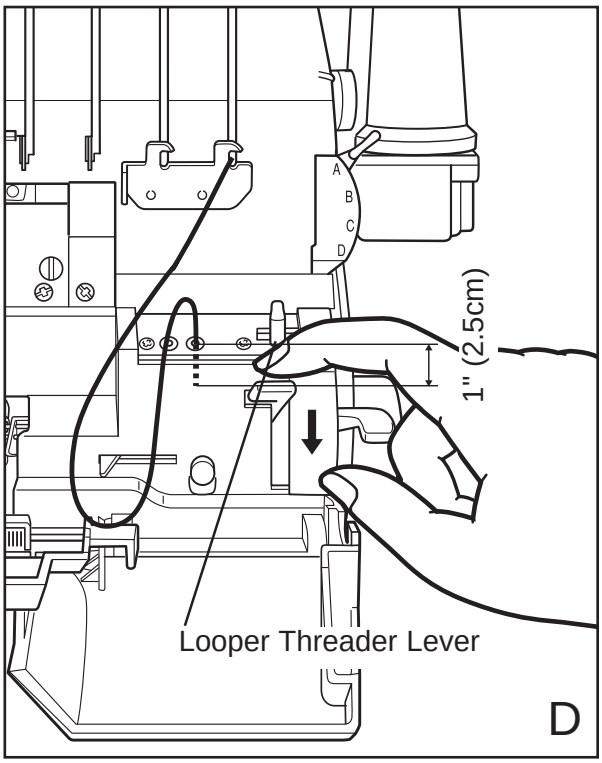




Upper Looper

1. With the presser foot up and machine lock button in the locked position, see fig. A, page 10, set the threading port selector lever to "U" for upper looper threading. See fig. B, page 10.
2. Place the thread on the Upper Looper spool pin on the thread stand. Slip the thread into the telescopic antenna thread guide "A" directly above the spool, snap into the thread guide "B", at the top of the front cover, through the slot on the front cover. See fig. C, below.
3. Pull 18 inches (40cm) of thread through guide "C". Insert the end of the thread into the threading port "U", about 1 inch (2.5cm). Use tweezers, if necessary, to insert the thread end more easily. See fig. D below.
4. Depress the threading lever (fig. D below) . If the thread does not go through the upper looper eye with one push, depress the threading lever again until it does, and leave thread hanging loose.
5. Move the lock button release lever to the right.

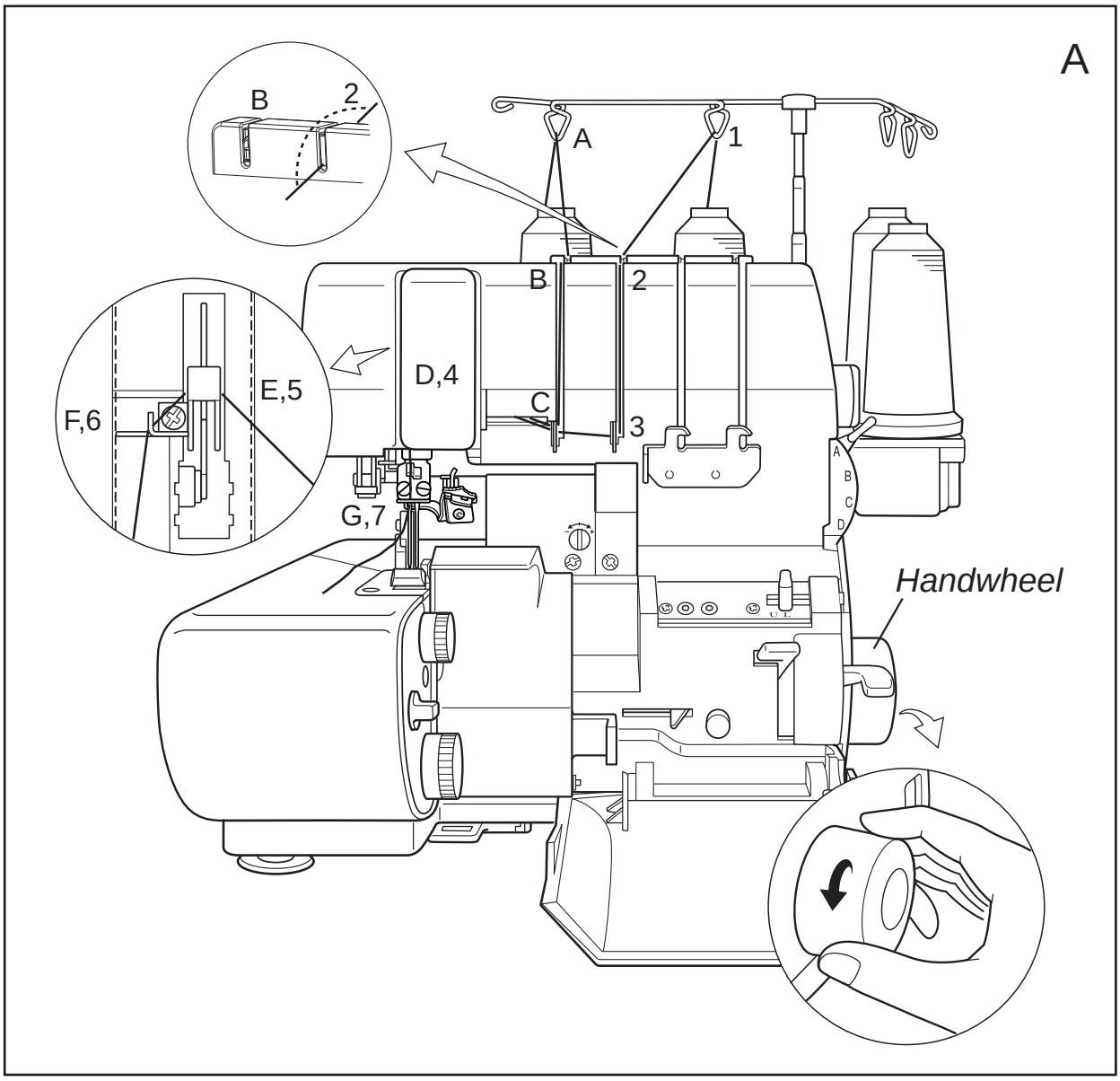




*Be *sure at least 1" of thread is inserted into the threading port.*

Right Needle

1. Set the needle threader selector on "R" for right needle (fig.B page 13).
   Note: Be sure to push the needle threader selector all the way to R.
2. Place the thread on the second from left spindle on the thread stand (fig.A). Thread needle thread guides 1 and 2, through the groove on the face plate and through guides 3, 4, 5, 6 and 7. Pull a 6" length of thread through guide 7.
3. Lower the presser foot to engage the tensions.
4. Thread into eye of needle with the needle threader.
   See the chart of needle threader page 13.
5. Continue pulling the thread loop manually through the needle eye until a single stand is threaded. Place the thread under the presser foot and to the left.



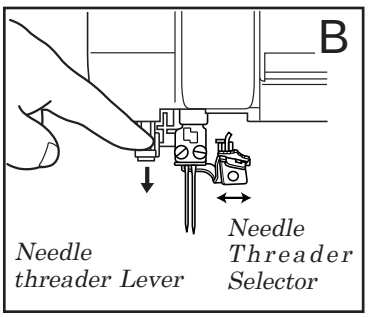
Left Needle

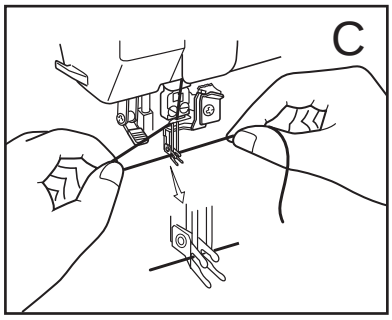
1. Set the needle threader selector on "L" for left needle.
2. Place the thread on the far-left spindle on the thread stand (fig.A page 12).
   Thread needle thread guides A and B, through the groove on the face place and through guides C,D,E,F and G.
3. Lower the presser foot and thread the left needles as in steps 4 and 5, under "Right Needle."

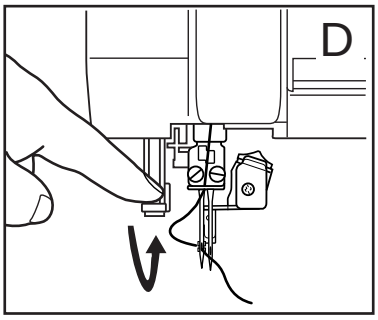
Needle Threader

1. Set the needle selector on "R" (right needle) or "L" (left needle).
2. Press the needle threader lever down (Fig. B) so that the hook goes into the eye of the needle. The hook will remain in the eye of the needle until you press the needle threader lever down again to release it.
3. Hold the needle thread horizontally with both hands and place the thread under the threader hook guides. (Fig.C)
4. Press the needle threader lever down again. (Fig.D) The hook will pull the thread through the eye of the needle as it is released.

NOTE: The machine in Locked Position also sets the needle position for using the Needle threader.
This is also a safety feature when threading as the machine cannot sew while in locked position.

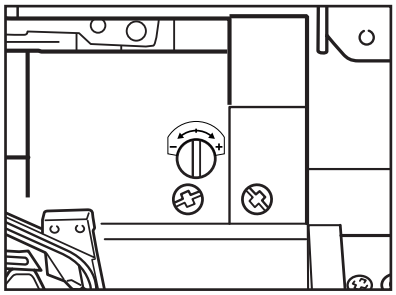




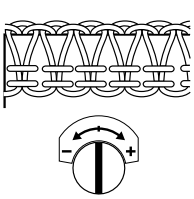


Looper Thread Fine-Tuning Screw

No adjustments are needed when sewing with most fabrics and threads on your Baby Lock Imagine Wave, but certain threads or fabrics may require minor fine-tuning of the looper delivery system to perfect your stitches. Increase or decrease the delivery of the looper threads with the upper and lower looper thread fine-tuning screw. With a screwdriver (found in accessory kit), turn the fine-tuning screw clockwise to tighten the looper threads. Turn the screw counter-clockwise to loosen the looper threads.

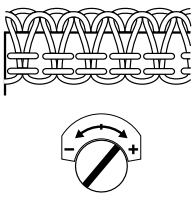


Ideal Stitch



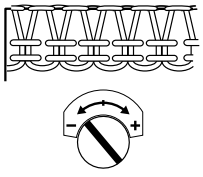
Standard Position

Looper threads are too loose.



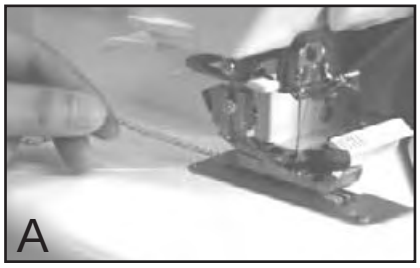
Tighten the screw (+)

Looper threads are too tight.



Loosen the screw (-)

Serging with fabric

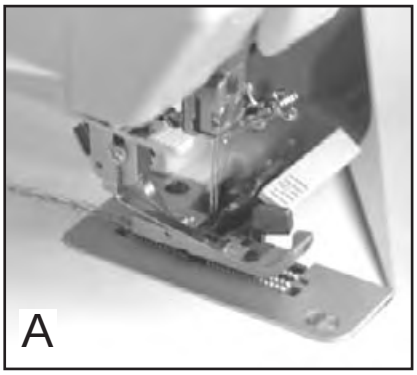


With the needle and upper looper threads under the foot and to the back, lower the presser foot. While holding the threads in your left hand, press down on the foot controller gently to begin a thread chain before serging fabric (fig.A).

You can leave the presser foot down for most serging applications. Just place the fabric at the toe of the presser foot. As you step on the foot controller, the feed dogs will begin moving the fabric toward the needle (fig.B). You need to raise and lower the foot only when working with thick, spongy or lofty fabrics, or when precise positioning is required.

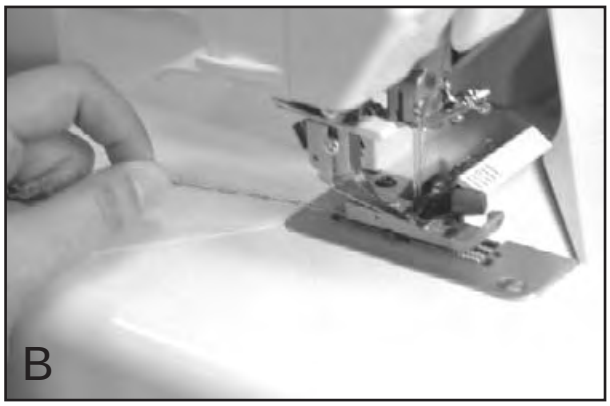
Be careful not to push or pull the fabric. The Imagine Wave will feed it evenly without help. At the end of a seam, just sew off the fabric edge and continue serging to create 5" - 6" thread chain. Cut the thread chain with the thread cutter on the left side cover (fig.C).

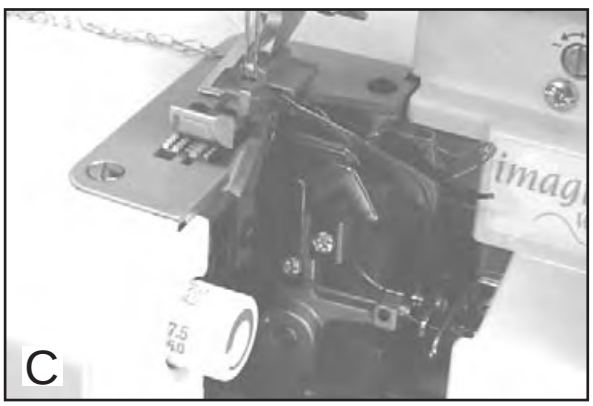
Clearing the Stitch Width Fingers



As you sew, you will discover that maneuvering the fabric is different from conventional sewing because the threads form around the stitch fingers (fig. A).

To clear the stitch fingers, simply raise the presser foot, which releases all threads. Raise the needle(s). Then pull the threads gently from behind the foot (fig. B). The stitches are now released from the fingers (fig. C).



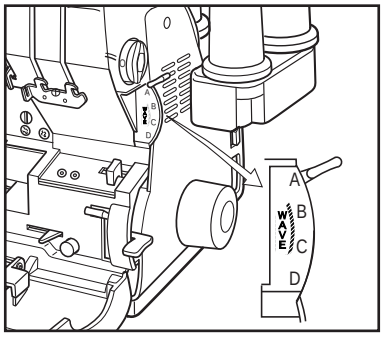


Thread Delivery System

The Baby Lock Imagine Wave revolutionizes the way a serger works with its Thread Delivery System. You no longer have to manually adjust the tension settings for the type of stitch you are serging. Select the type of stitch you wish to serge, the Imagine Wave will automatically feed the correct amount of thread through the loopers and thread guides to form a perfect stitch every time.

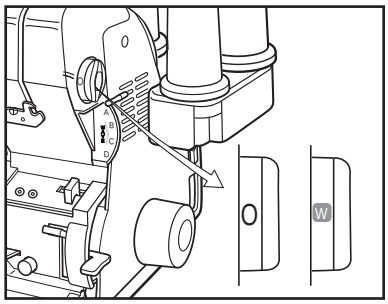
Stitch Selector

The stitch selector controls the thread delivery system and is located on the right front side of the machine. To select a stitch setting, move the stitch selector lever to A, B, C, or D.
A - For Wide Overlock Stitches.
B - For Right Needle Wave Stitch, and right needle overlock stitches.
C - For narrow stitches, and Rolled Wave Stitch using right needle.
D - For 3-Thread Rolled Hem stitch.
See chart on last page for stitch selection settings.



Wave Selector

The Wave Selector dial shows "O" and "W". Select "O" for overlock stitching. Select "W" for wave stitching.



Re-threading Loopers

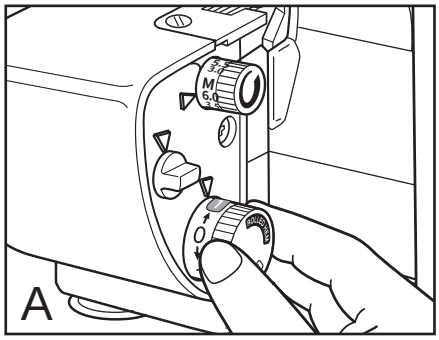
If a thread breaks, raise the presser foot and pull the broken thread out from under the foot. Open the front cover, depress the machine lock button and set the looper threader selector to U or L for the looper being threaded. Re-thread the machine above the threading port, leaving an 18inch (40cm) thread tail. Thread the looper as usual and move lock button release lever to the right. Close the front cover and sew a test sample. Refer to page 13 for further information.

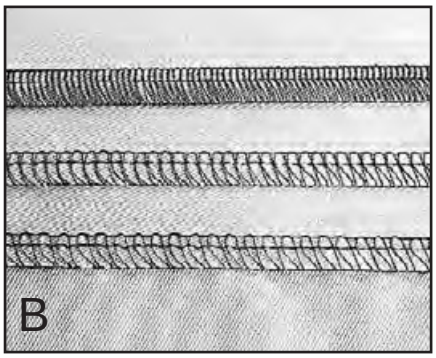
Note: When re-threading your Baby Lock Imagine Wave using the "Jet-Air Threading" feature, make sure that the previous thread that was in the looper (tube) is completely removed. This will eliminate any chance of the previous thread obstructing the flow of the air when re-threading the machine.

Re-threading Needles

If a needle thread breaks, raise the presser foot, remove the broken thread and rethread the needle thread guides. Open the front cover, depress the machine lock button. Select the "R" or "L" for the needle being rethreaded. Use the needle threader for exact and easier threading. Refer to pages 13 for further information.

Stitch Length/Rolled Hem

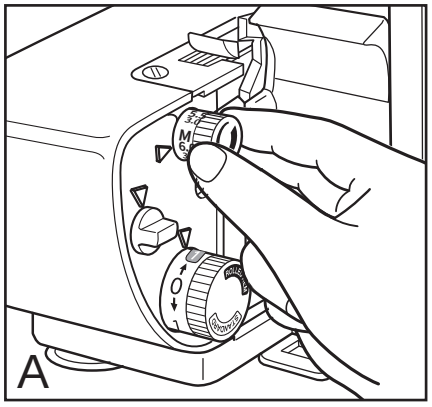


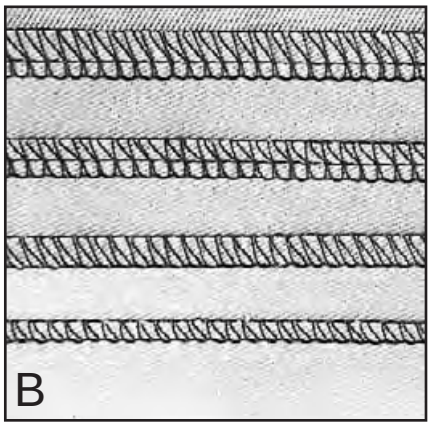


The stitch length / rolled hem adjusting dial is conveniently located just to the left of the front cover, near the base plate (fig. A). The dial shows two stitch-length ranges, each numbered from 1, for the shortest stitch, to 4 for the longest. As the dial indicates, one range is for standard sewing and one is for rolled edging or narrow seaming.

Simply turn the dial aligning the desired setting with the indicator on the machine. A stitch length of 3mm, or about 10 stitches per inch is ideal for seaming and overedging most fabrics. For overedging or seaming very lightweight fabrics, you may prefer a shorter stitch length. When sewing heavier fabrics, you may choose to lengthen the stitch (fig. B).

Stitch Width





The stitch width adjusting dial is located above the stitch length dial (fig. A). The stitch width dial displays two sets of numbers, indicating two width ranges. The larger numbers at each end of the dial, 5.5 and 7.5mm, denote the stitch width dial when the left needle is in use. The smaller numbers, 3.0 and 5.0mm, apply when the right needle is in use.

Adjusting the stitch width moves the upper cutting blade. It also moves the stitch fingers further apart or closer together for complete fabric support with any stitch width.

The stitch width is variable by the placement of Right and Left needles and the stitch width dial positions. (Fig.B)

Differential Feed

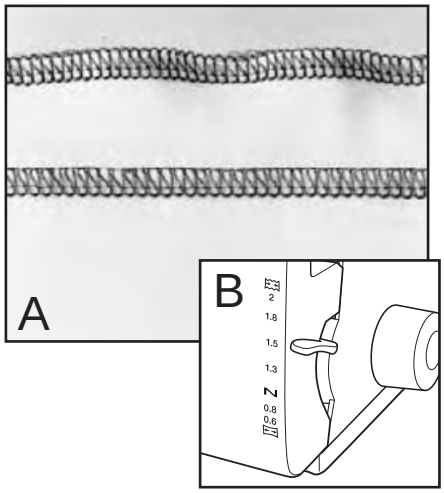
Your Baby Lock serger is equipped with differential feed.The set of feed dogs work independently in order to ensure smooth sewing on all fabrics (fig. A)

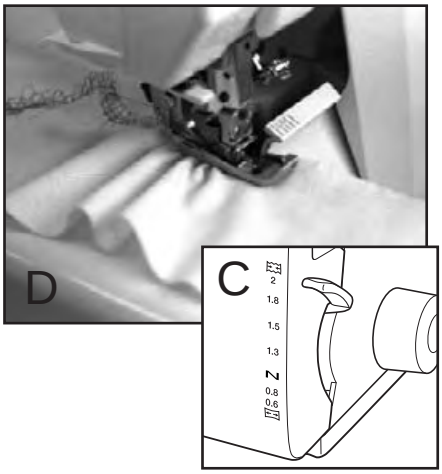
When the differential feed adjusting lever, located at the machine's right, front edge is set on "N" for normal feeding, the feed dogs move the same distance. This is the setting to use for most fabrics and applications (fig. B).

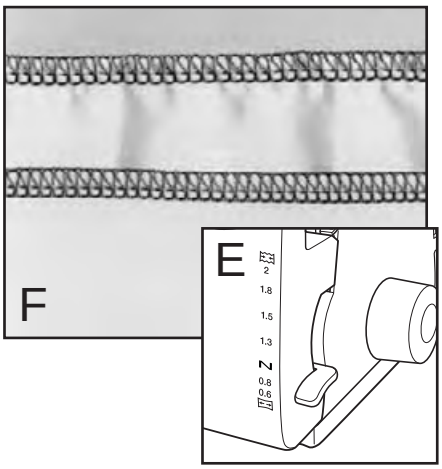
When the dial is set above "N", the front feed dog will feed more fabrics than the back. This is because the front feed dog moves at a greater distance than the back feed dogs. As a result, the fabric becomes compressed or eased, as the diagram on the front cover indicates. This action can eliminate wavy seams in stretchy fabrics or those cut on the bias grain.

At the maximum setting of 2.0 (fig. C), the differential feed can gather a lightweight fabric to nearly double fullness (fig. D).
The front feed dog is actually feeding in twice as much fabric as the back feed dog is feeding out. To maximize the gathering effects, use the longest stitch length setting. Fabric weight will affect the gathering. Test stitch for desired results.

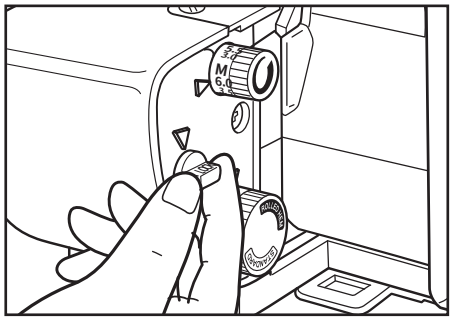
When the differential feed lever is set below "N" (fig. E), the front feed dog moves less distance than the back feed dog. This adjustment stretches the fabric slightly as it is sewn pulling it taught as it enters the needle. The lower settings prevent puckers on lightweight fabric (fig. F), add more stretch to swim wear, active wear, and can be used to create a lettuce edge (see page 36).





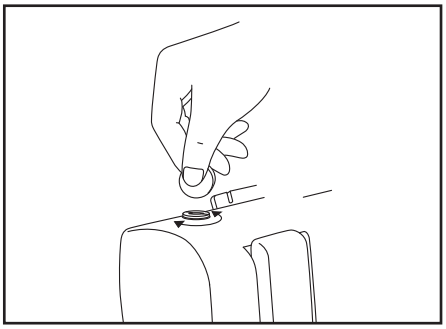


Disengaging the Upper Cutting Blade



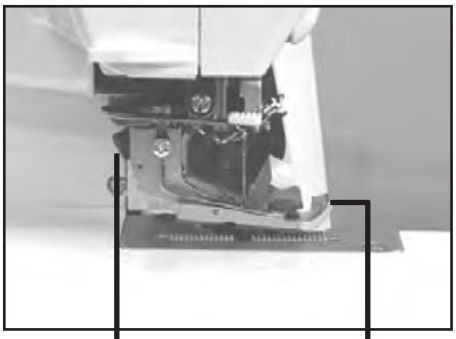
When no trimming is desired, as when stitching on a fold, flip the cutting blade lock switch clockwise to the LOCK position. The cutting blade no longer moves up and down, but remains in its lowered position. To re-engage the cutting blade, turn the cutting blade lock switch half of a turn counter-clockwise. The blade will start moving automatically when you start sewing.

Presser Foot Pressure Adjustment



The presser foot pressure has been preset at the factory and rarely needs adjustment. You may find it necessary, however, to decrease the pressure for thick fabrics or increase pressure for thin fabrics to feed more smoothly under the foot. Use a coin to turn the screw on top of the machine.
To increase pressure, turn the pressure adjusting screw clockwise.
To decrease pressure, turn the screw counterclockwise.

Snap-On Presser Foot



Presser Foot Release Button

Seam Line Guides

The Imagine Wave has the convenience of a snap-on presser foot.
To Release:
1. Raise the presser foot lever.
2. Lower the cutting blade.
3. Raise the needles to the highest position.
4. Push the presser foot release lever located at the back of the presser foot holder.
5. Carefully turn the presser foot clockwise 90 degrees.
6. Slide the presser foot to the rear to remove.

To Replace:
1. Raise the presser foot lever.
2. Lower the cutting blade.
3. Raise the needles to the highest position.
4. Slide the foot from the left to right.
5. Align the bar of the foot with the groove in the holder.
6. Lower the presser foot lever to snap into place.

The presser foot that comes with the Imagine Wave has a tape sewing slot. Insert the tape or ribbon, into the slot in the front of the foot, then under the sole of the foot. (see page 41 for more instruction)

The raised markings on the toe of the foot are seam line guides. They indicate the needle positions to help guide your fabric for accurate seaming.

4-Thread Overlock

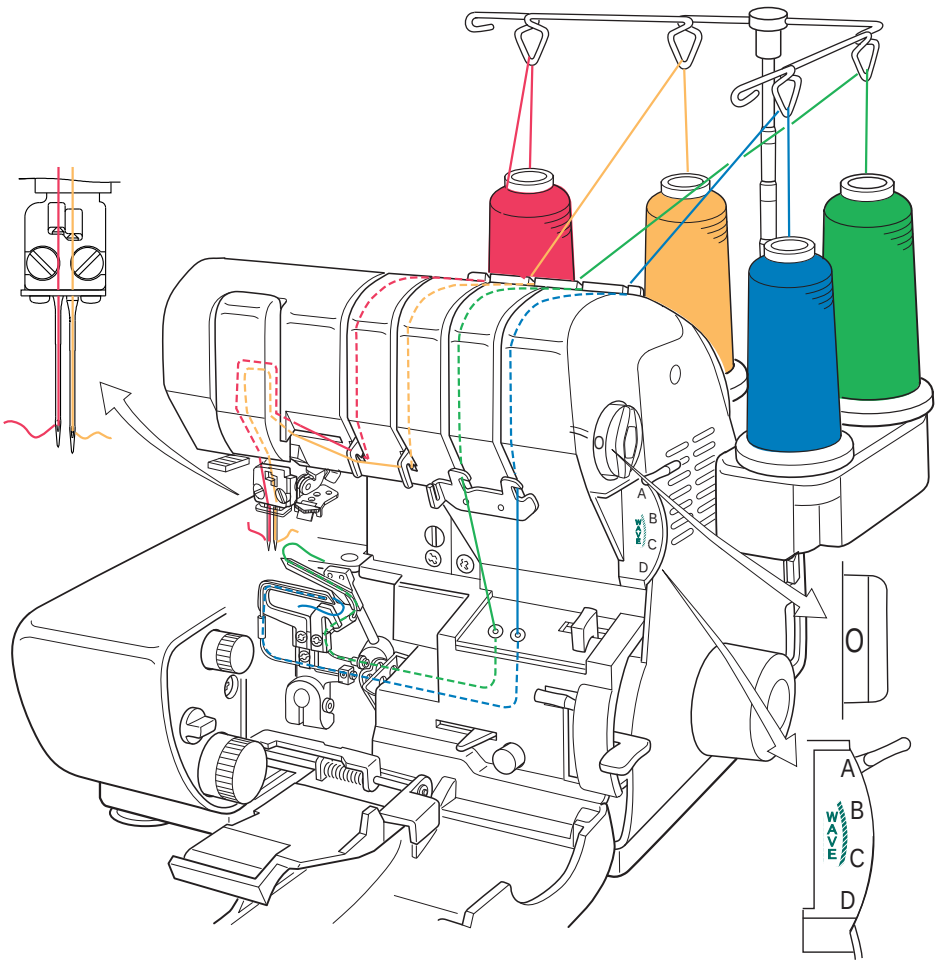
With the Imagine Wave Thread Delivery System, the upper and lower looper threads lock together evenly over the cut fabric edge(s) to form a flat, non-rolling pattern of overlocking stitches on both sides of the fabric.

The left needle thread interlocks with both looper threads at the stitching line to create the seam. The right needle thread, visible on the top side of the stitch, interlocks with both the loopers to add durability. The upper looper thread, that resembles a zigzag on the upper side of the fabric, is from the upper looper. The lower looper thread, that resembles a zig zag on the lower side of the fabric, is from the lower looper.

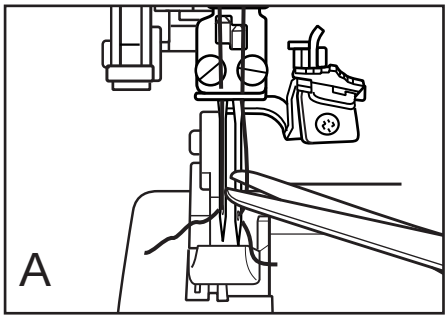
Move the stitch selector lever to "A".

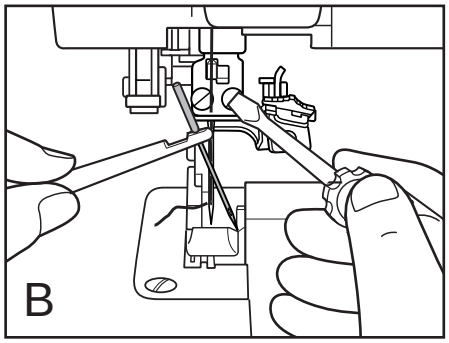
For the perfect 4-thread overlock stitch, follow the suggested settings and threading diagram below.

NEEDLES	LENGTH	WIDTH	STITCH SELECTOR	WAVE SELECTOR
left & right	2.5-3.5	6.0-7.5	A	O



3-Thread Overlock-Wide





The 3-thread overlock wide stitch is perfect for edge-finishing most woven fabrics and for seaming knits that do not require the extra durability that a fourth thread provides.

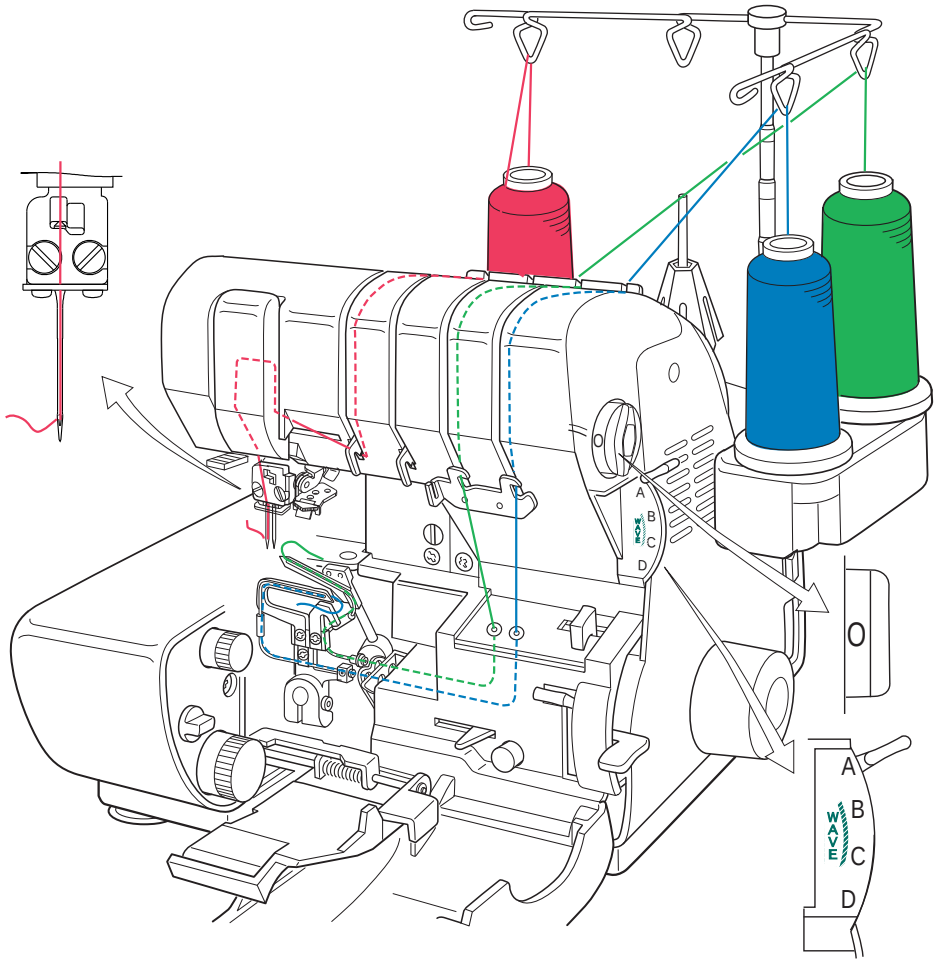
It's easy to convert your Imagine Wave to serge with 3 threads by simply eliminating either needle.

To convert your serger to a 3-thread overlock wide (5.5-7.5mm), cut the needle thread just above the needle eye (fig. A). Remove the right needle and thread completely from the machine. Re-tighten the needle clamp screw slightly to prevent the screw from working out (fig. B).

Move the stitch selector lever to "A".

For left needle, 3thread overlock, follow the suggested settings and the threading diagram below.

NEEDLES	LENGTH	WIDTH	STITCH SELECTOR	WAVE SELECTOR
left	2-3	7.5	A	O

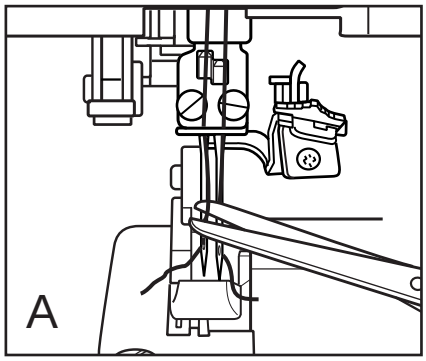


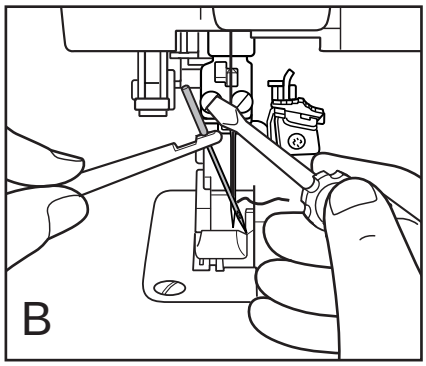
3-Thread Overlock-Narrow

It's easy to convert your Imagine Wave to serge with 3 threads by simply eliminating the left needle.

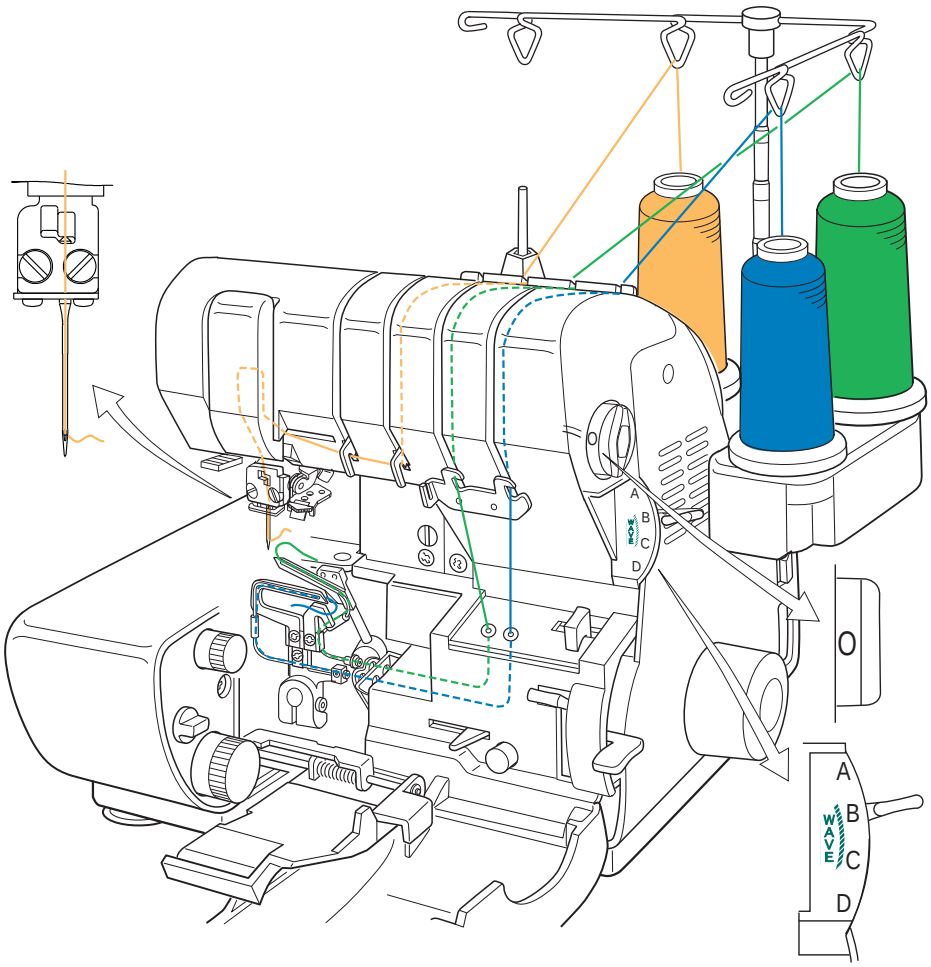
To convert to narrow 3-thread overlock (3.0-5.0mm), cut the left needle thread (fig. A). Remove the left needle and left needle thread completely from the machine.
Tighten the needle clamp screw slightly to prevent the screw from working out (fig. B).
Place needle into right needle clamp position and tighten screw.
Move the stitch selector lever to "B".

For the right needle, 3-thread overlock sewing, follow the suggested settings and the threading diagram below.

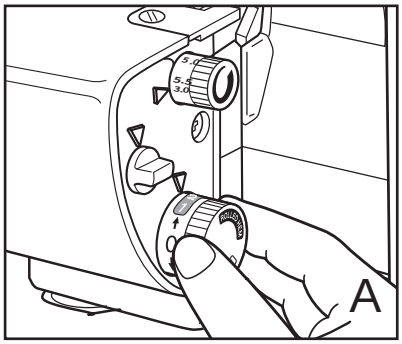


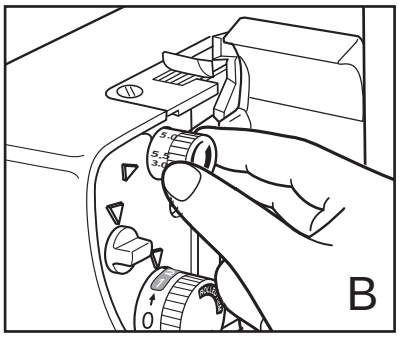


NEEDLES	LENGTH	WIDTH	STITCH SELECTOR	WAVE SELECTOR
right	2.5-3.5	3.0	B	O



3-Thread Overlock-Narrow Hemming





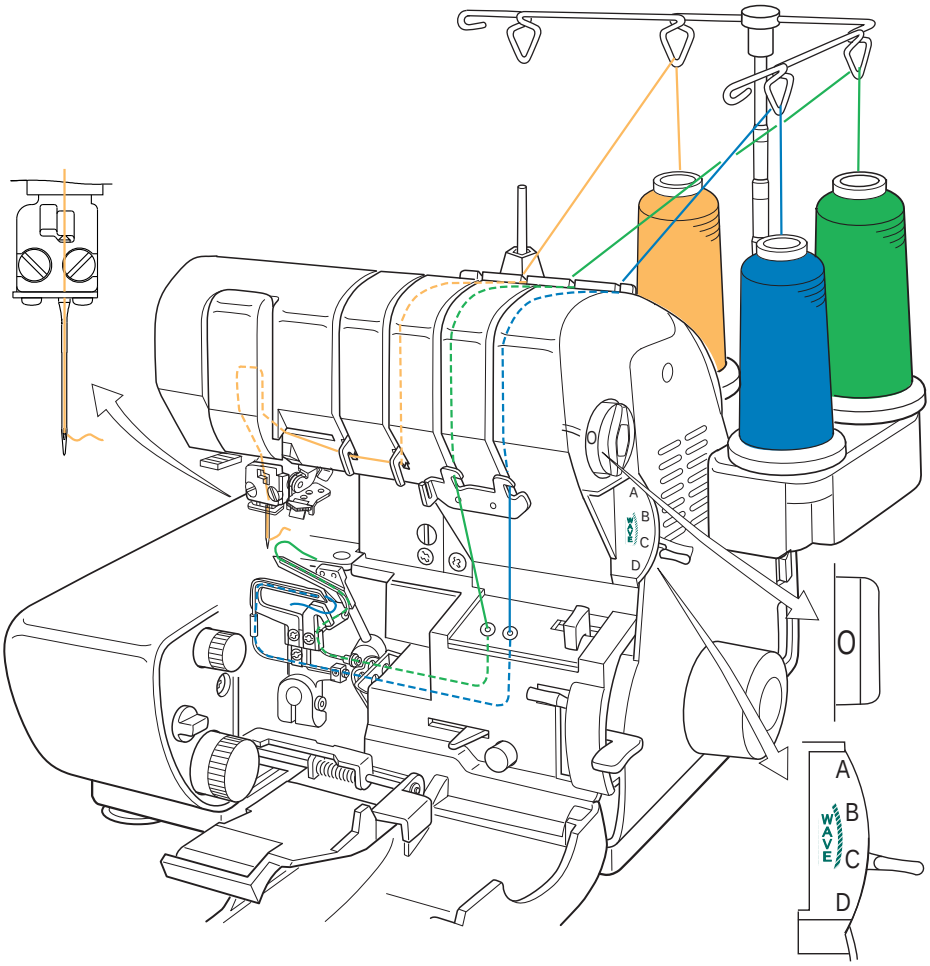
Narrow Hemming is an attractive finish for light to medium to heavy weight fabrics.

Remove the left needle and needle thread completely from the machine. Clear the stitch fingers. Turn the stitch length adjusting dial clockwise to the rolled hem range. Set the length at "1" (fig. A) and the stitch width at 3.0 for a smooth decorative finish (fig. B).

Move the stitch selector lever to "C".

For the right needle 3-thread narrow hemming, follow the suggested settings and the threading diagram below.

NEEDLES	LENGTH	WIDTH	STITCH SELECTOR	WAVE SELECTOR
right	1.0-1.5R	3.0	C	O



Rolled Edging

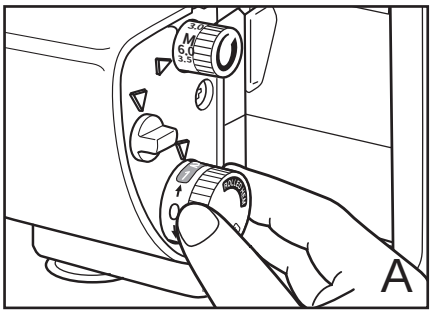
The rolled edge setting is used to achieve the narrowest stitch possible (1.5mm) on your Baby Lock serger. The stitch is suitable for seaming sheer and lightweight fabrics and for edging and hemming lightweight fabrics.

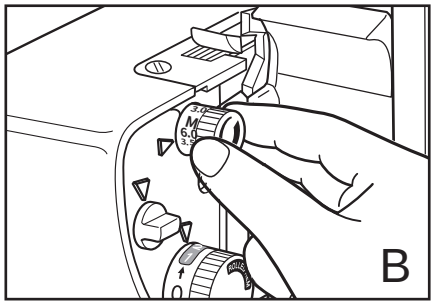
3-Thread Rolled Edge

With the stitch selector set on "D", a narrow hem will become a rolled edge. The fabric edge rolls around the stitch finger. The upper looper wraps the fabric edge while the lower looper thread is nearly invisible on the back side of the stitch formation.

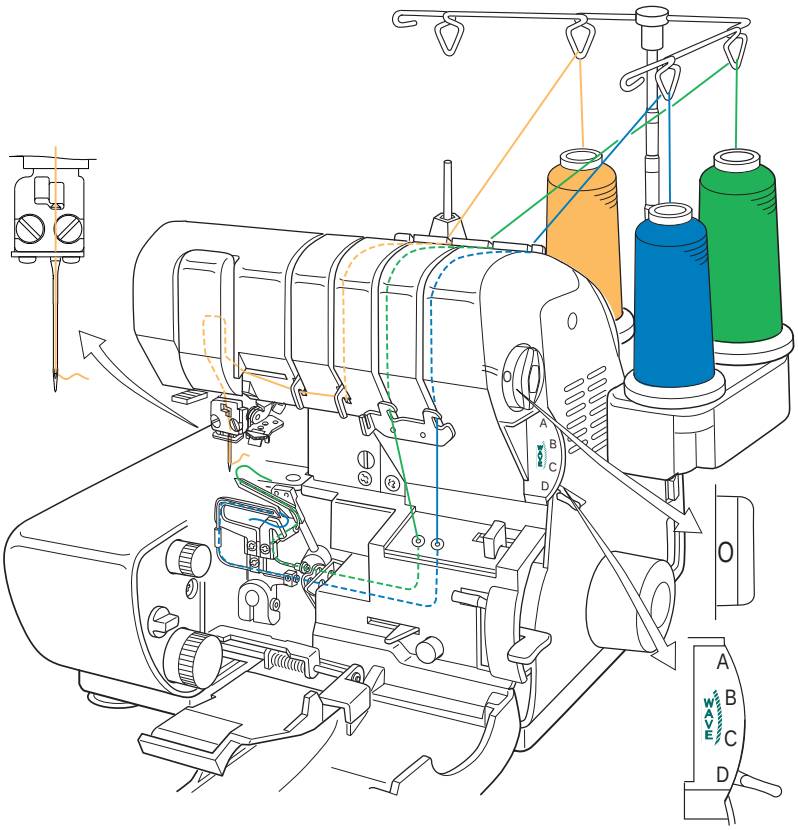
Remove the left needle and thread. Clear the stitch fingers. Turn the stitch length adjusting dial counterclockwise into the rolled hem range at 1.5 setting (fig. A). Set the stitch width dial to 3.5 "M" (fig. B).

For a 3-thread rolled edge, Move the stitch selector lever to "D".





NEEDLES	LENGTH	WIDTH	STITCH SELECTOR	WAVE SELECTOR
right	1.5R	3.5	D	O



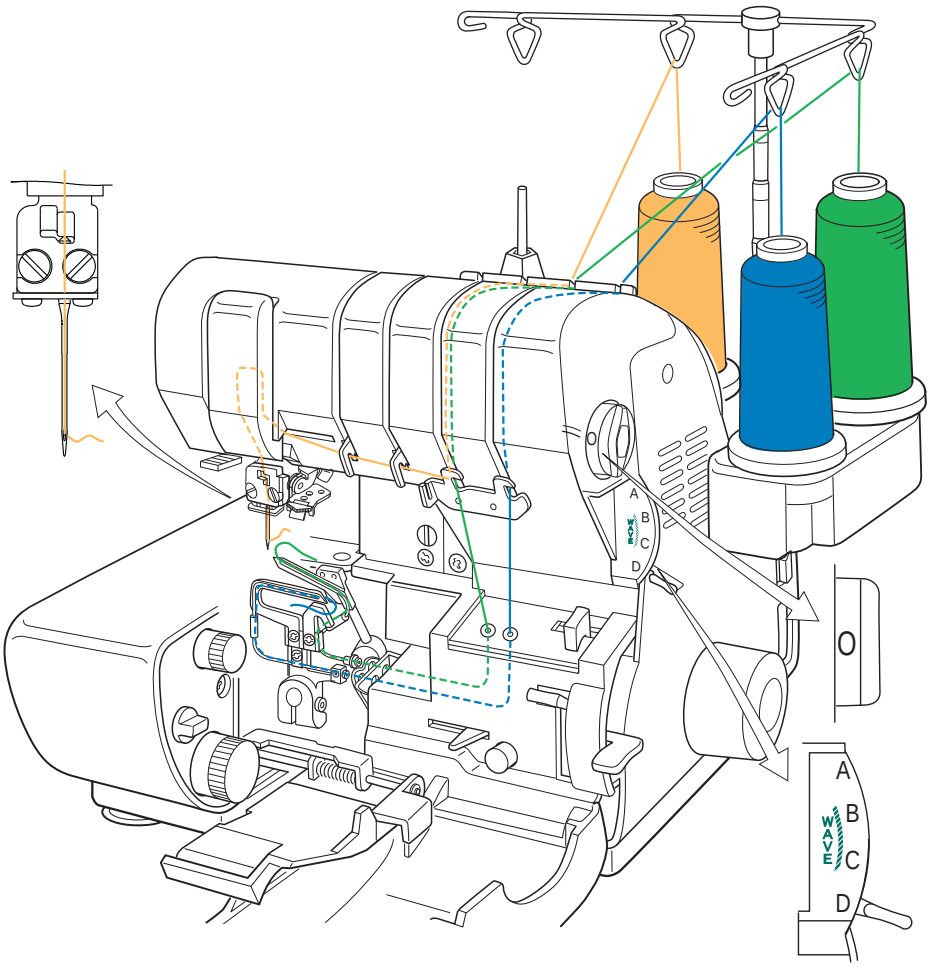
3-Thread Flatlock

Flatlock seams are most suited to fabrics which do not ravel such as interlock knits, tricot, sweatshirt fleece and synthetic suede. The needle thread is carried below the fabric and to the cut edge of the fabric. The lower looper thread rides along the cut edge of the fabric for stability. The edges pull open and flatten within the stitch for a non-bulky join (fig. A). Be sure to sew a test sample first to determine whether the stitch will have the strength to hold the seam without the fabric pulling away.

Move the stitch selector lever to "D".

For the right needle 3-thread flatlock, follow the suggested settings and the threading diagram below.

NEEDLES	LENGTH	WIDTH	STITCH SELECTOR	WAVE SELECTOR
right	2-3	3.0-5.0	D	O

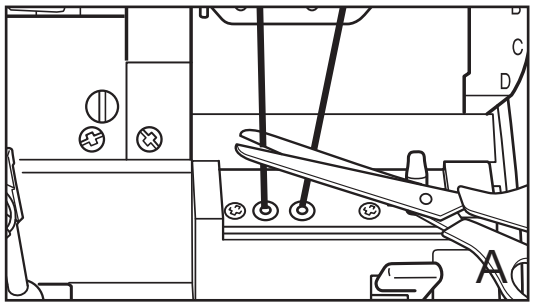


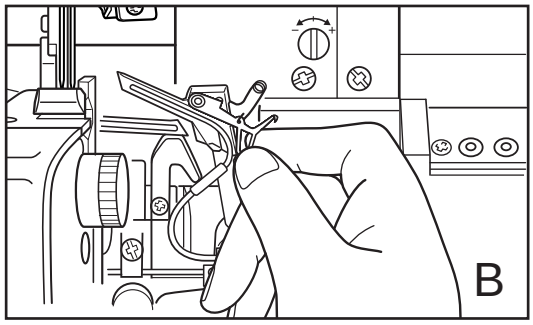
2-Thread Overlock

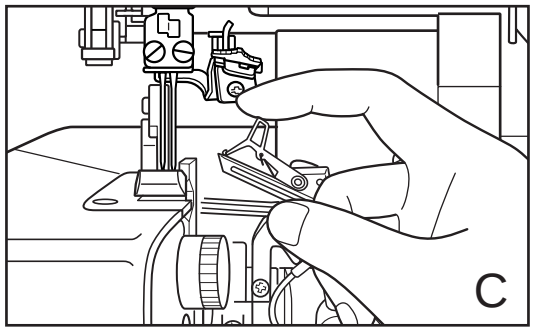
The 2-thread function provides an economical and less bulky means of overedging all fabrics. The standard 2-thread overlock is the same as a 2-thread flatlock stitch.
When sewn with specialty threads, 2-thread sewing makes decorative seams and edges for activewear, children's clothing , ruffles, and hemlines.

Converting from 3-Thread Overlock to 2-Thread Overlock

Left or right needle positions can be used for 2-thread serging.
See machine threading illustrations on page 26.







1. Place the left needle thread on far left spool pin (or right needle thread on second from left spool pin) and bring the thread end through the telescopic thread guide directly above the spool of thread. Bring the thread through the top thread guide that is normally used for the upper looper (3rd from left), and down the front. Then take the thread to the left and thread the machine as you would for the needles in their normal position. (see illustration on page 26 for correct threading).

2. Using the needle threader, thread the eye of left or right needle. (see page13 for threading of needles)

3. Rotate the handwheel to bring the upper looper into position to attach the subsidiary looper. Rotate the subsidiary looper up and to the left (fig.B) then slip the end into the upper looper eye. (fig.C) Close the cutting blade cover and front cover.

4. Unlock the machine to expose the thread. Using your tweezers, pull the thread out of the tubular looper at the lower end of the looper tube. Bring the thread up to the large thread guide below the face plate and to the left under the square guide. Bring the thread up and over the take-up lever slot, down and into the last thread guide above the overlock needles.

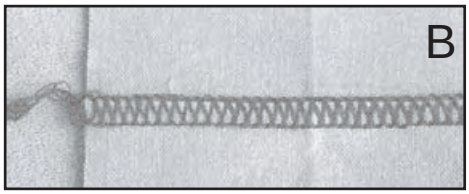
5. The needle and lower looper threads should overcast evenly on the cut edge of the fabric.

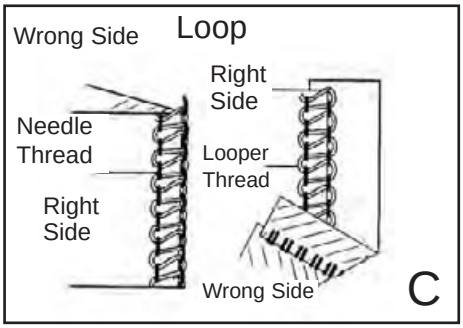
6. Rotate the handwheel to bring the upper looper to its lowest position. Rotate the subsidiary looper up and to the left (fig. B) then slip the end into the upper looper eye (fig. C). Close the blade cover and front cover.

7. The needle and lower looper thread should overcast evenly on the cut edge of the fabric.

Note: The blade cover has been removed in photos B and C for a clear view. You do not need to remove the blade cover.

2-Thread Flatlock - Wide





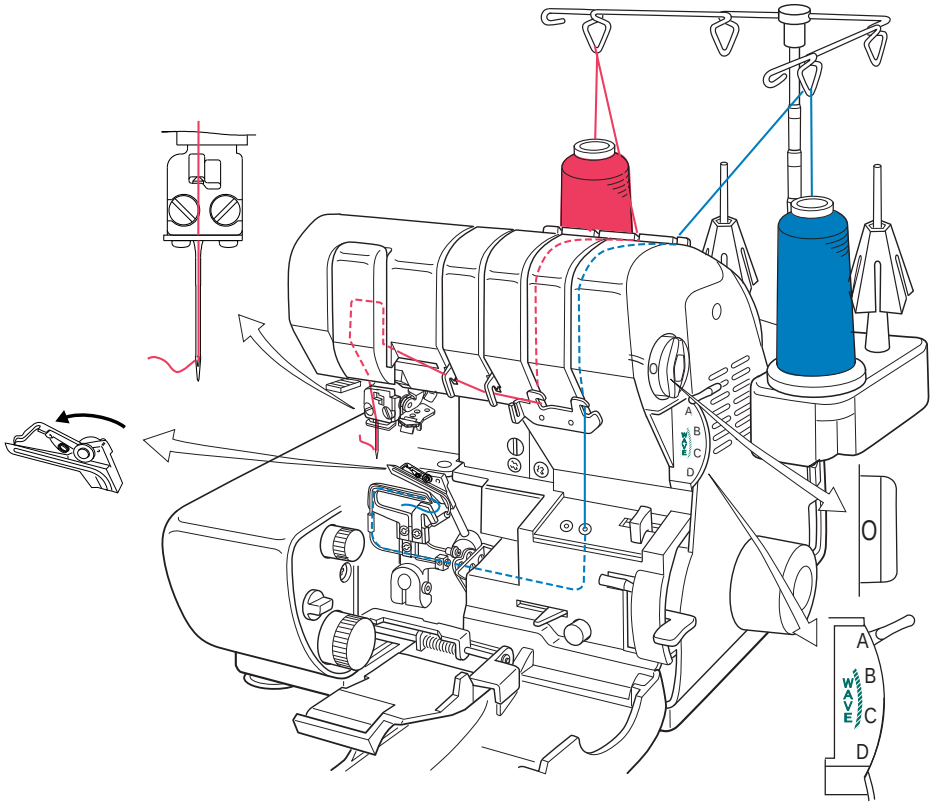
Sew 2-thread flatlock seams in the same way as 3-thread flatlock seams, then pull the two fabric layers apart until the seam lies flat (fig. A). Because the threads show on the outside as well as the inside of the garment or project, the 2-thread flatlock seam is often considered a decorative application (fig. B). Be sure to sew a test sample first to determine whether the stitch will have the strength to hold the seam without the fabric pulling away.

For 2-thread flatlock - wide

1. Lock the machine.
2. Place the needle thread on far left spool pin.
3. Thread needle thread through the upper looper thread guide on top of the machine, then go down the thread path in the front of the machine. Go left with the needle thread at the hook on front of the machine. Then take the needle thread through the normal needle thread paths. (See illustration below).
4. Engage the subsidiary looper following step 3 on page 25.
5. Thread the lower looper as shown in the illustration below.

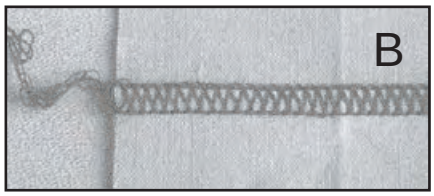
If you want the "overlock stitching" to show on the right side of the fabric, place wrong sides together and sew. (Fig. C)

NEEDLES	LENGTH	WIDTH	STITCH SELECTOR	WAVE SELECTOR
left	2-2.5	7.5	A	O



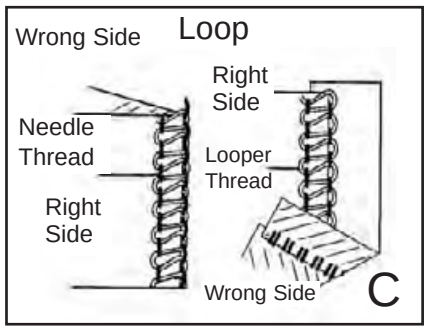
2-Thread Flatlock - Narrow

Sew a 2-thread flatlock seam then pull the two fabric layers apart until the seam lies flat (fig. A).
Because the threads show on the outside as well as the inside of the garment or project, the flatlock seam is often considered a decorative application (fig. B).

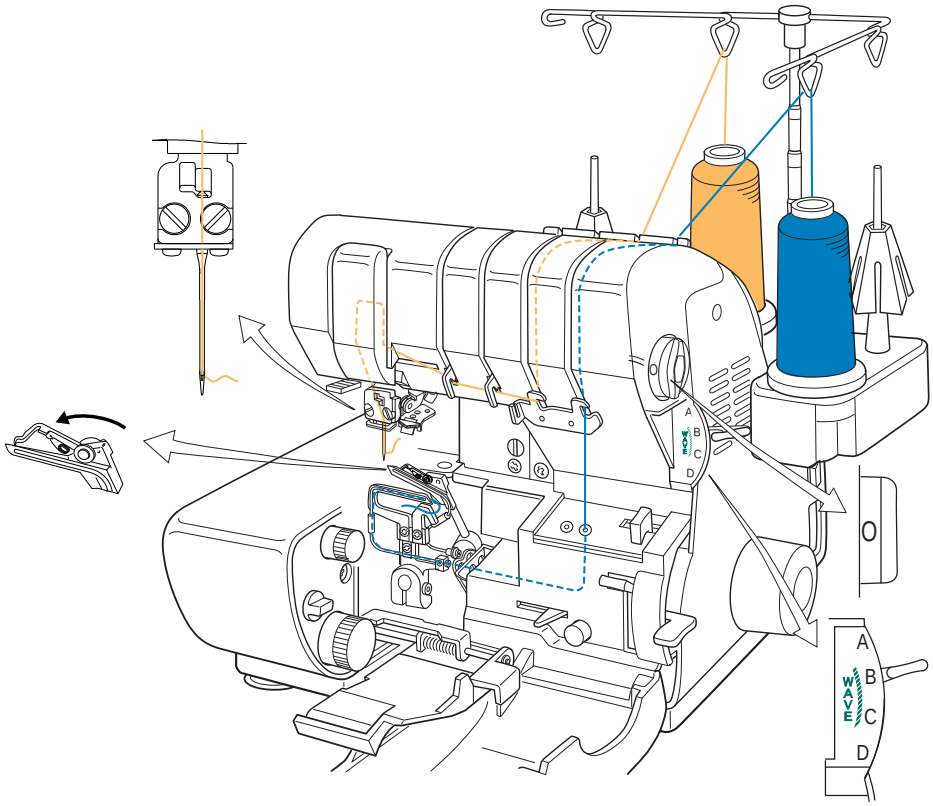


For 2-thread flatlock - narrow
1. Lock the machine.
2. Place needle thread on right needle spool pin.
3. Thread needle thread through the upper looper thread guide on top of the machine, then go down the thread path in the front of the machine. Go left with the needle thread at the hook on front of the machine. Then take the needle thread through the normal needle thread paths. (See illustration below).
4. Engage the subsidiary looper following step 3 on page 25.
5. Thread the lower looper as shown in the illustration below.

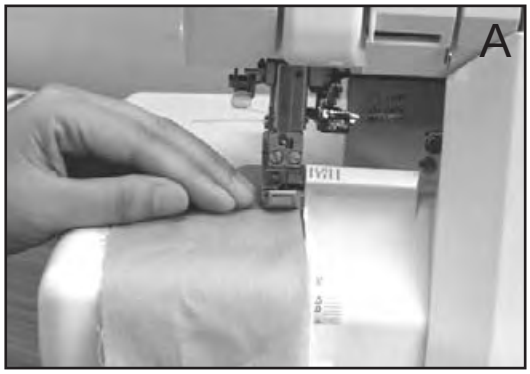
If you want the "overlock stitching" to show on the right side of the fabric, place wrong sides together and sew. (Fig. C)

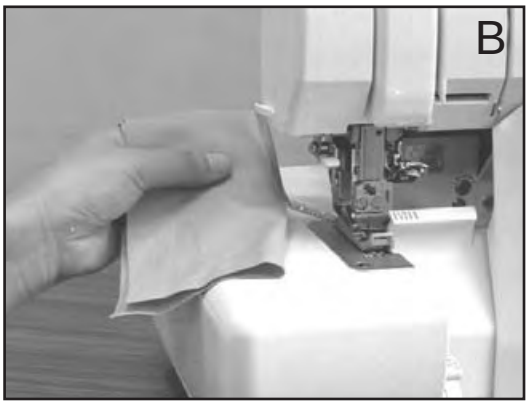


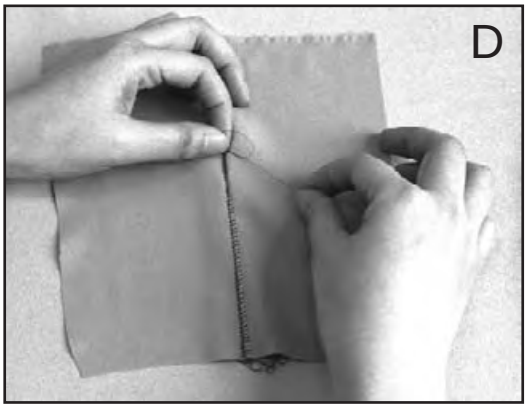
NEEDLES	LENGTH	WIDTH	STITCH SELECTOR	WAVE SELECTOR
right	3-3.5	3.5	B	O



Flatlock "Topstitching"







The flatlock stitch need not be limited at seamlines. When sewn on a fold, flatlocking can create attractive decorative effects within the body of a garment or project. Either follow placement lines on your pattern or design your own special effects by stitching the fabric before laying out pattern pieces.

1. Set the machine for 2-thread flatlock - wide.
2. Turn the cutting blade lock switch clockwise to disengage the upper cutting blade.
3. Set the stitch length to desired setting.
4. Fold the fabric (right side or wrong side out, depending on the loop or ladder stitch you want to show) along stitch placement lines.
5. Position the fabric under the presser foot, aligning the fold of the fabric 1/8 inch (3.5mm) to the left of the upper cutting blade (fig A).
6. Stitch to the desired ending point.
7. Clear the stitch fingers and chain off the fabric (fig B).
8. Clip threads, leaving a 3-4 inch (7.5-10cm) chain.
9. Gently pull the fabric to flatten the stitches (fig C).
10. Separate the chain threads and thread them through a needle and pull them to the fabric back side. If necessary, tie a knot to secure the threads (fig D).

Note: If the fabric does not pull completely flat under the stitches, guide the fabric fold to the left so that the loops hang slightly off the fold as they are being stitched.

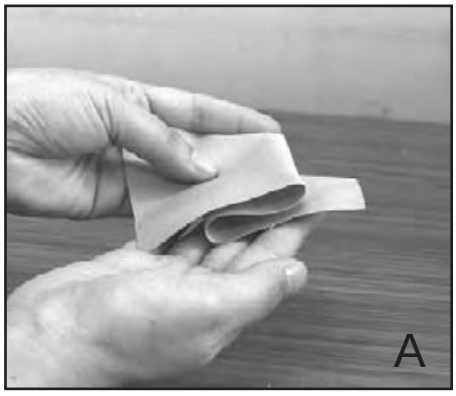
Blind Hemming

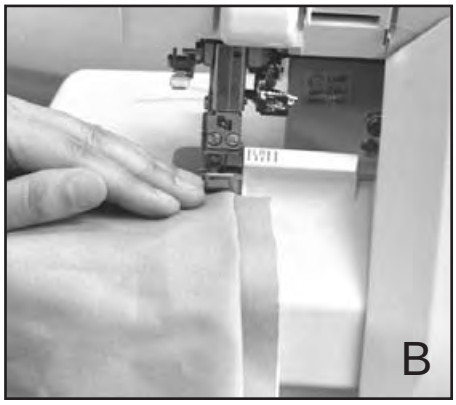
You Baby Lock Imagine Wave can create a sturdy, nearly invisible blindhem.

1. Set the machine for 2-Thread Overlock with the right needle threaded. Set the stitch width at 5.0 and the stitch length at 4.0 in the standard range.
2. Fold up the hemline and press it in place. Then fold the hem allowance back against the fabric right side to create a fold about 1/4 " from the top edge of the hem as shown (fig. A).
3. Align the fold under the presser foot and stitch, allowing the needle to catch only a thread or two of the soft fold: the blade will trim the top edge of the hem and the loopers will overcast the edge for a clean finish (fig. B).
4. Open the fold and press flat (fig. C).

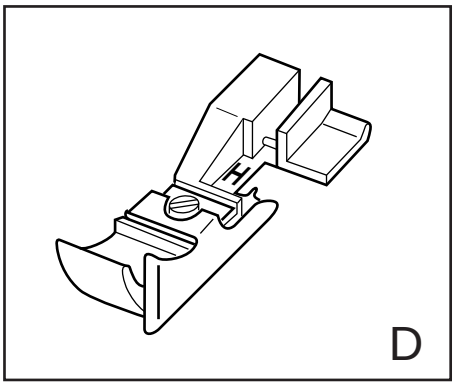
Note: An optional blindhem foot for consistent guiding is available through your Baby Lock retailer (fig. D).

See page 7 Optional Accessories listing for part number.

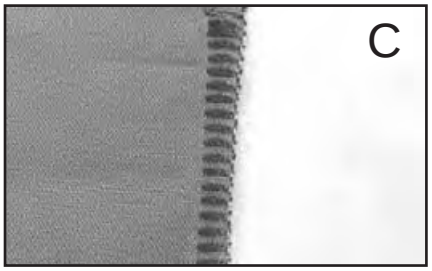

A


B

C


D

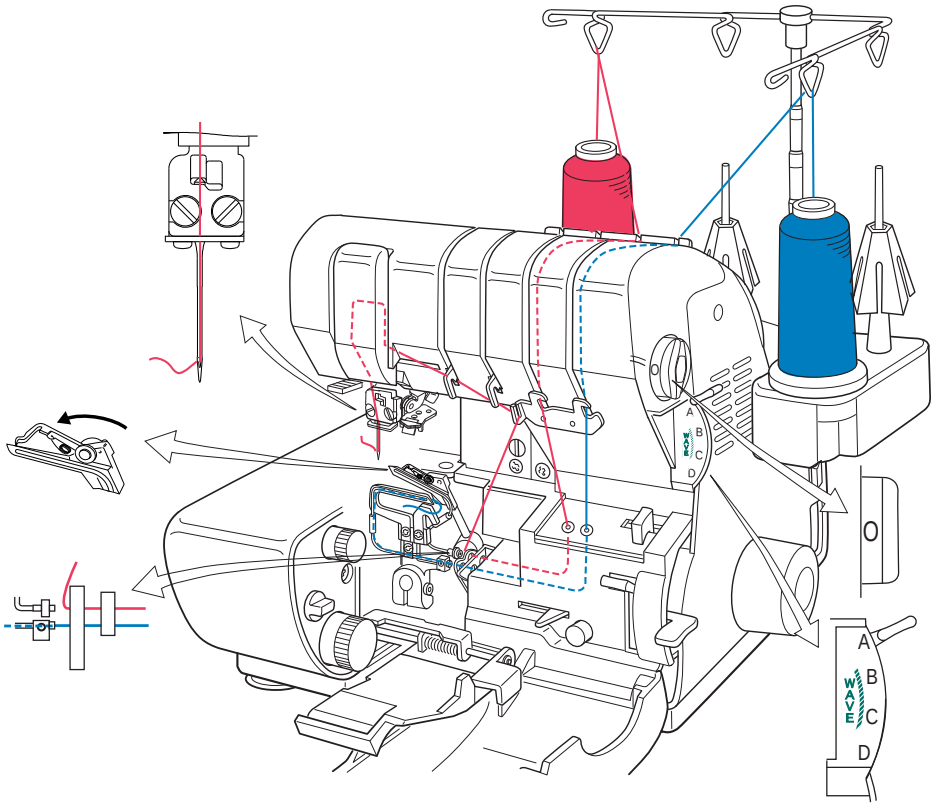
Blanket Stitch - Decorative Stitch



NOTE: The threading path for the needle thread is different in this technique. Please refer to the thread reference guide chart or the illustration below.

1. Set up the machine for 2 Thread Flatlock - Wide. (See threading illustration below)
2. A heavy decorative thread will be used in the needle.
3. Maxilock thread will be used in the lower looper.
4. Insert a size 90 Top Stitch needle in left needle position.
5. Swing the subsidiary looper in place on the upper looper.
6. Place Water Soluble Stabilizer on top of the fabric, along the edge.
7. Stitch along the edge of the fabric. (Fig. A)
8. When finished stitching, pull the water soluble stabilizer to the edge of the fabric. This will pull the stitching to the edge and will look like a blanket stitch.

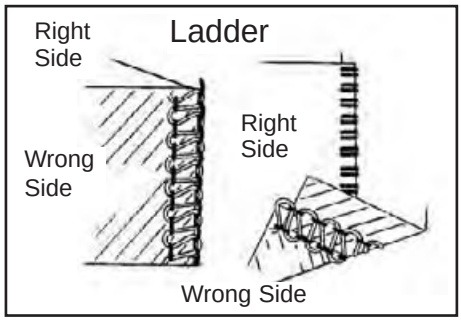
NEEDLES	LENGTH	WIDTH	STITCH SELECTOR	WAVE SELECTOR
left size 90 Top Stitch Needle	4.0	7.5	A	O

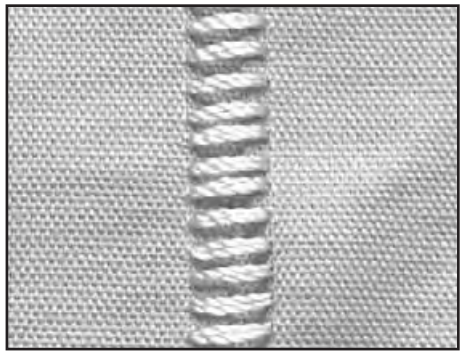


Ladder Stitch - Decorative Stitch

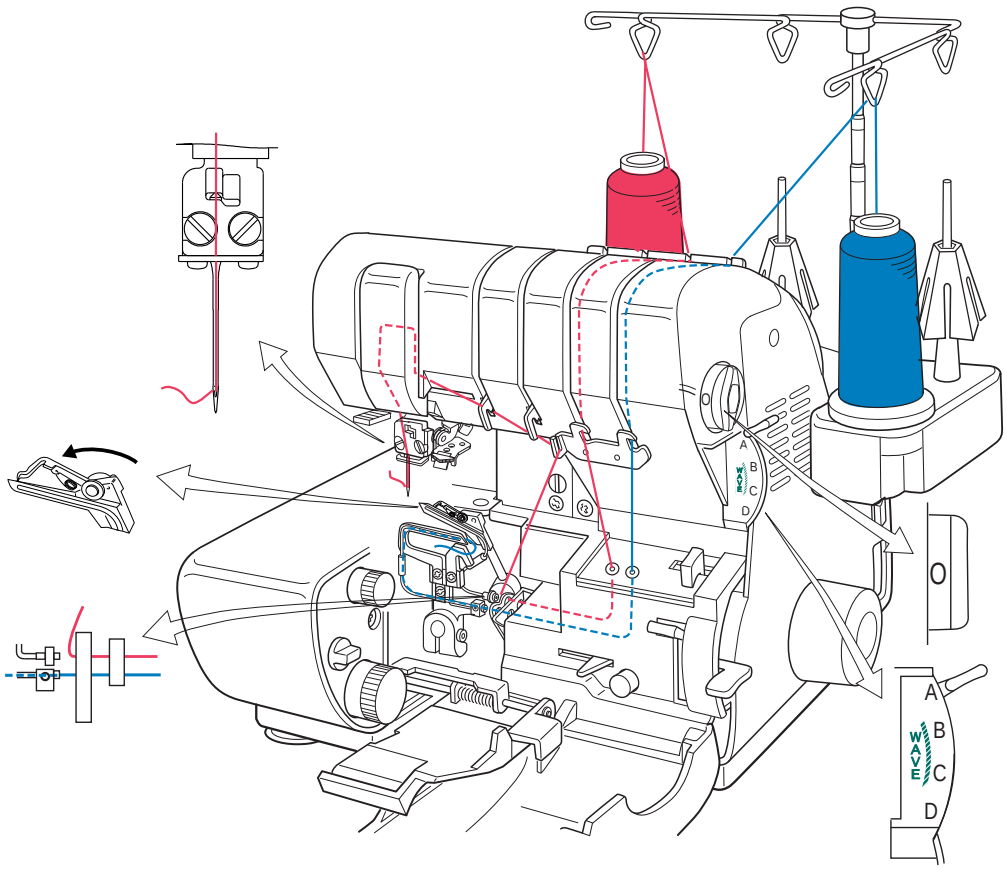
NOTE: The threading path for the needle thread is different in this technique. Please refer to the thread reference guide chart or the illustration below.

1. Set up the machine for 2 Thread Flatlock - Wide. (See threading illustration below)
2. A heavy decorative thread will be used in the needle.
3. Maxilock thread will be used in the lower looper.
4. Insert a size 90 Top Stitch needle in left needle position.
5. Swing the subsidiary looper in place on the upper looper.
6. Place the fabric pieces right sides together for the decorative ladder to be on the right side of the fabric. (This can also be done on the fold as well)
7. Sew the fabric together and gently pull open revealing the decorative ladder stitching on the right side of the fabric.

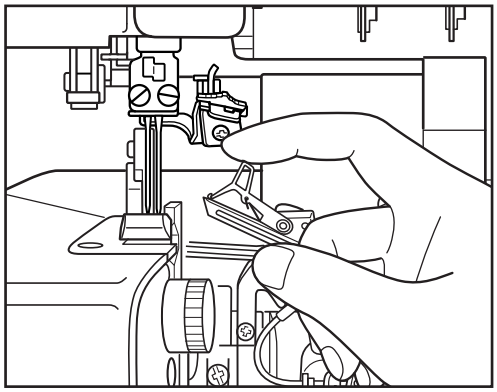




NEEDLES	LENGTH	WIDTH	STITCH SELECTOR	WAVE SELECTOR
left size 90 Top Stitch Needle	2-3	7.5	A	O



Returning to 3 or 4-Thread Overlock



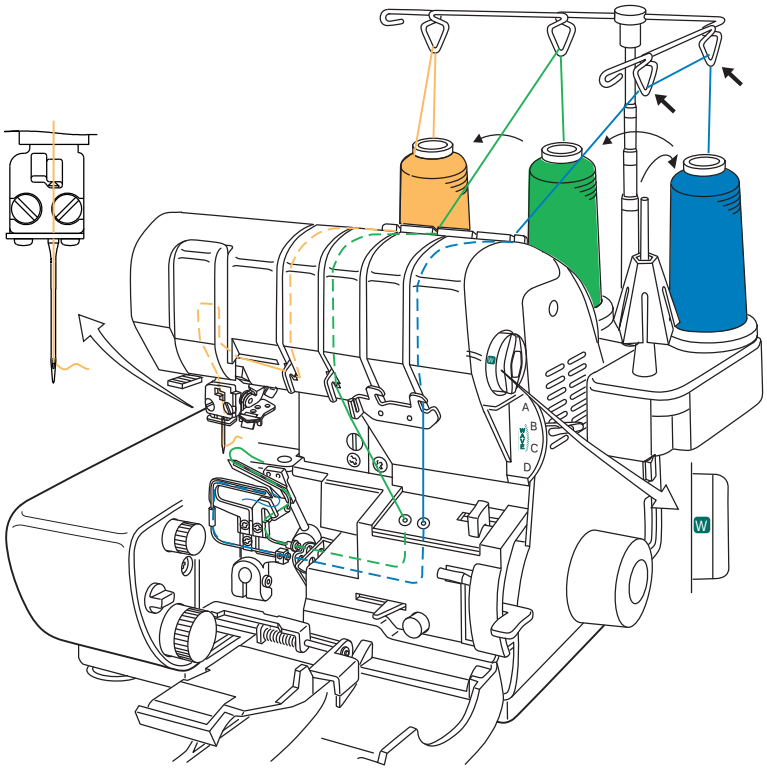
1. Open the front cover and rotate the handwheel forward to bring the upper looper to its lowest position.
2. With your index finger or tweezers, release the subsidiary looper from the eye of the upper looper. Rotate it further to the right until it snaps back into place and out of the way.
3. While holding the machine lock button down, rotate the handwheel forward until the button locks into place. Rethread the upper looper (see page 11). For 4-thread serging, replace the second needle (see page 48). Rethread the needle (see page 13). Release the machine lock button.
4. Close the front cover.
5. Lower the foot and sew a test stitch.

Wave Stitch

The Wave Stitch provides a decorative "wavy" edging on fabric. (This is not to be confused with "Lettuce Edge" on page 36). The upper looper thread and the lower looper thread gradually appear every 25 stitches to create a stitch that looks like a "Wave". When using different color specialty threads (see pages 46 & 47) for the upper or lower loopers, the Wave stitch creates an attractive stitch for edging.
When combining decorative threads for the Wave stitch, please sew test on a sample of the fabric you will be sewing on before applying the Wave stitch.
For best results, heavier decorative threads should be limited to the upper or lower looper at one time. Not both upper looper and lower looper at the same time. Wooly nylon in the corresponding looper and maxilock thread in the right needle will make a striking combination with the heavy decorative thread.

Converting from Normal Serging to Wave

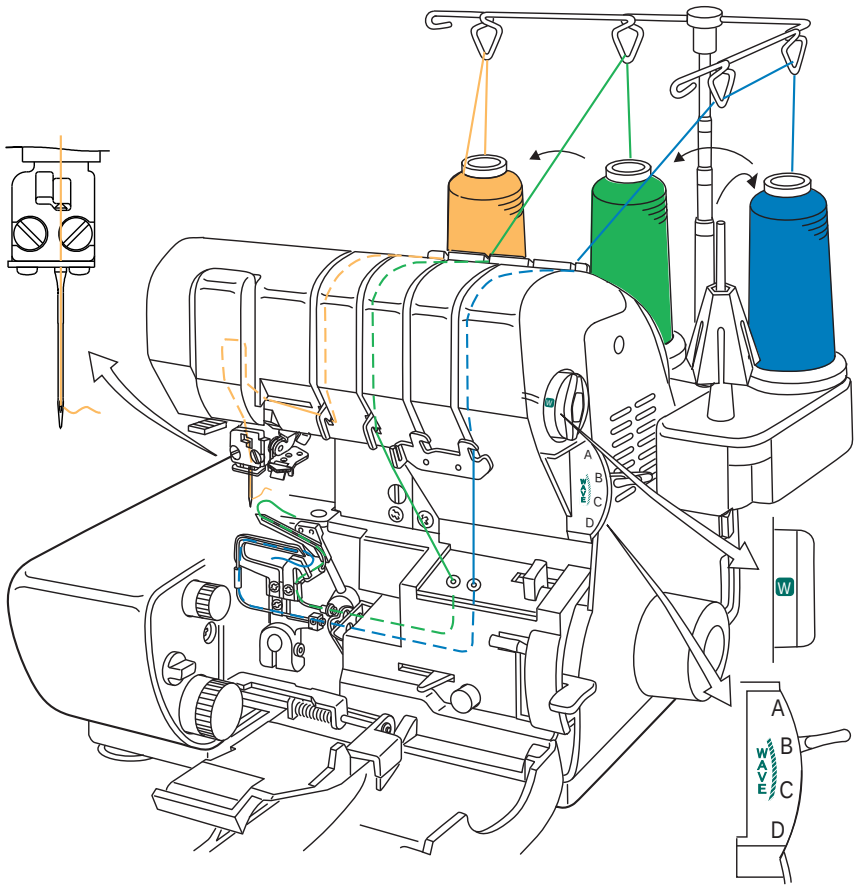
1. Turn the Wave Selector dial from "O" to "W".
2. Cut the threads from the thread cones and remove from the thread paths.
3. Lock the machine for threading the loopers. (see page 10)
4. Place the right needle thread cone on the far left spool pin.
5. Slip the right needle thread into the telescopic thread guide directly above the thread. Follow the left needle threading path down to the right needle.
6. Thread the right needle using the needle threader set on "R". (see page 13)
7. Place the upper looper thread cone on the 2nd from left spool pin.
8. Slip the upper looper thread into the telescopic thread guide directly above the thread. Follow the top threading path for the right needle thread, down the front threading path, to the left of the chrome thread guide, and directly to the "U" jet air threading port for the upper looper. Set the Looper Threader Selector on "U". Thread the upper looper. (see page 11)
9. Place the right needle thread and upper looper thread under the presser foot and to the back.
10. Place the lower looper thread cone on the 3rd from left spool pin.
11. Slip the lower looper thread into the telescopic thread guide directly above the thread, then slip the thread into the lower looper telescopic thread guide to avoid the thread getting tangled while sewing. Take the thread through the standard lower looper threading path to the "L" jet air threading port for the lower looper. Set the Looper Threader Selector on "L". Thread the lower looper. (see page 10)
12. Set Stitch Selector for Wave Stitch or Rolled Wave Stitch. (see page 34 or 35 for correct setting)
13. Set Stitch Length and Stitch Width following the illustration on page 34 and 35).



3-thread Wave Stitch

1. Turn the Wave Selector dial from "O" to "W".
2. Cut the threads from the thread cones and remove from the thread paths.
3. Lock the machine for threading the loopers. (see page 10)
4. Place the right needle thread cone on the far left spool pin.
5. Slip the right needle thread into the telescopic thread guide directly above the thread. Follow the left needle threading path down to the right needle.
6. Thread the right needle using the needle threader set on "R". (see page 13)
7. Place the upper looper thread cone on the 2nd from left spool pin.
8. Slip the upper looper thread into the telescopic thread guide directly above the thread. Follow the top threading path for the right needle thread, down the front threading path, to the left of the chrome thread guide, and directly to the "U" jet air threading port for the upper looper. Set the Looper Threader Selector on "U". Thread the upper looper. (see page 11)
9. Place the right needle thread and upper looper thread under the presser foot and to the back.
10. Place the lower looper thread cone on the 3rd from left spool pin.
11. Slip the lower looper thread into the telescopic thread guide directly above the thread, then slip the thread into the lower looper telescopic thread guide to avoid the thread getting tangled while sewing. Take the thread through the standard lower looper threading path to the "L" jet air threading port for the lower looper. Set the Looper Threader Selector on "L". Thread the lower looper. (see page 10)
12. Set Stitch Selector on "B" for Wave Stitch.
13. Set Stitch Length and Stitch Width following the illustration below.

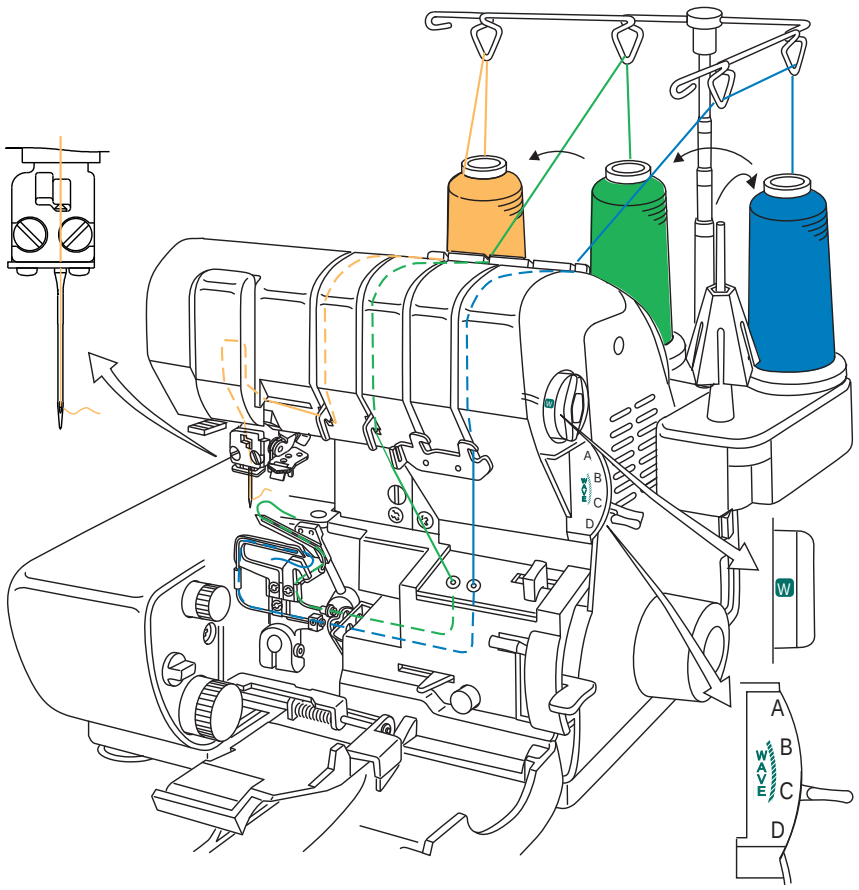
NEEDLES	LENGTH	WIDTH	STITCH SELECTOR	WAVE SELECTOR
right	1.0-2.5	5.0	B	W



3-Thread Rolled Wave Stitch

1. Turn the Wave Selector dial from "O" to "W".
2. Cut the threads from the thread cones and remove from the thread paths.
3. Lock the machine for threading the loopers. (see page 10)
4. Place the right needle thread cone on the far left spool pin.
5. Slip the right needle thread into the telescopic thread guide directly above the thread. Follow the left needle threading path down to the right needle.
6. Thread the right needle using the needle threader set on "R". (see page 13)
7. Place the upper looper thread cone on the 2nd from left spool pin.
8. Slip the upper looper thread into the telescopic thread guide directly above the thread. Follow the top threading path for the right needle thread, down the front threading path, to the left of the chrome thread guide, and directly to the "U" jet air threading port for the upper looper. Set the Looper Threader Selector on "U". Thread the upper looper. (see page 11)
9. Place the right needle thread and upper looper thread under the presser foot and to the back.
10. Place the lower looper thread cone on the 3rd from left spool pin.
11. Slip the lower looper thread into the telescopic thread guide directly above the thread, then slip the thread into the lower looper telescopic thread guide to avoid the thread getting tangled while sewing. Take the thread through the standard lower looper threading path to the "L" jet air threading port for the lower looper. Set the Looper Threader Selector on "L". Thread the lower looper. (see page 10)
12. Set Stitch Selector on "C" for Rolled Wave Stitch.
13. Set Stitch Length and Stitch Width follwing the illustration below.

NEEDLES	LENGTH	WIDTH	STITCH SELECTOR	WAVE SELECTOR
right	1.0-1.5R	3.0-5.5	C	W



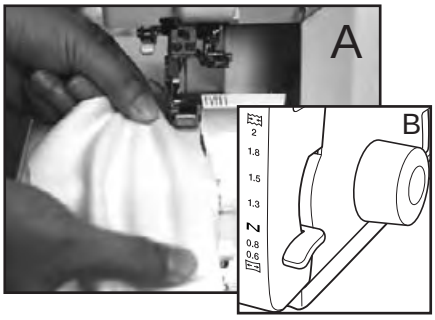
Rolled Edging

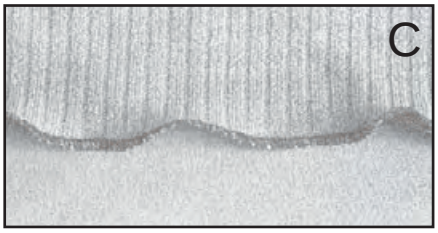
To convert "ROLLED EDGE", please refer to page 23 to change the settings and threading.

Seaming Sheers

Use the 3-thread rolled hem setting when sewing sheer fabrics that otherwise would require French seams. Set the stitch length at 2.5. Then simply sew the seams, aligning the fabric edges with the serger seam guide, trimming away the excess seam allowance.

Lettuce Edge





A frilly or "lettuce" edge can be created on most light and medium weight stretch fabrics and on bias edges of soft, woven fabrics. It makes a pretty decorative edging for activewear, lingerie, accessories and children's wear.

Set the machine for the 3-thread rolled edge.
Set differential feed at 0.6 (fig.B). Serge the fabric in the direction of greatest stretch - the crossgrain on knits, bias grain on wovens. For a "leafier" effect, try using a shorter stitch length and gently stretch the fabric (fig.A) as it is being sewn. Sew a test sample (fig.C).

Belt Loops and Button Loops

Use the rolled edge thread chain, stitched without fabric, to make professional belt loops and button loops. Using a heavy decorative thread in the upper looper forms a stronger loop.

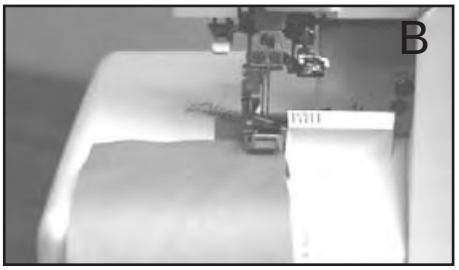
Returning to Standard Serging

Clear the stitch fingers and return the stitch length dial to the standard range. Set stitch width and length at the desired settings. Replace the left needle and its corresponding thread, if desired.

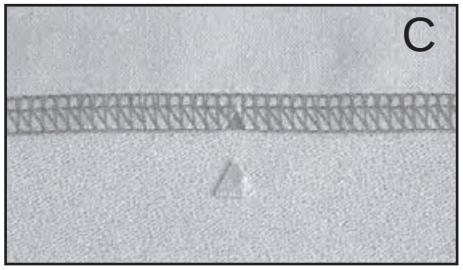
Overedging

Overedging to finish facings, hems and seams before construction, is one of the most basic uses of a serger, such as making a garment or project with 5/8 inch (16mm) pressed open seams (fig. A).

To overedge, place the single layer of fabric in front of the presser foot, aligning the cut edge with upper cutting blade. Begin serging, continuing to guide the fabric along the blade. The edge of the fabric should be trimmed, but not cut away. Then sew the seams on your conventional sewing machine and press them open as usual (fig. B).



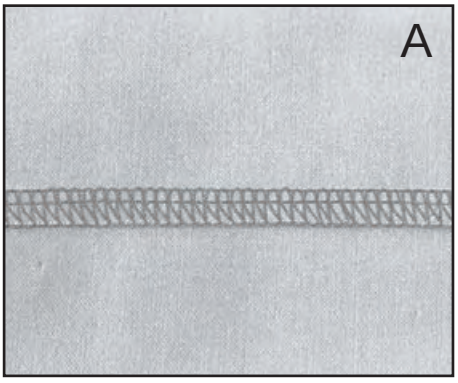
Because notches would be cut away in this process, mark them before serging with "V" snips just inside the seam allowance or with a water-soluble fabric marker (fig. C).



Note: A 2-thread overlock or 3-thread overlock can also be used with this technique.

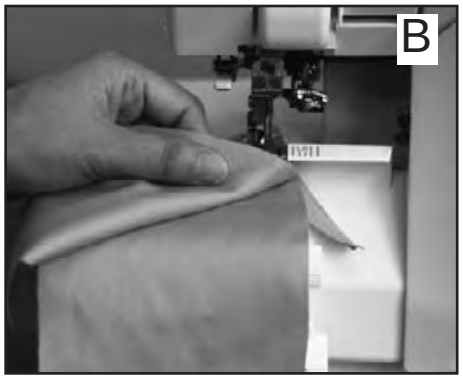
Seaming

For garments or projects that do not require conventional pressed-open seams, you can stitch and finish the seam in one operation and then press the seams to one side (fig. A). A 4 or 3-thread seam is strong, yet it provides "give" or flexibility according to the needs of the fabric.



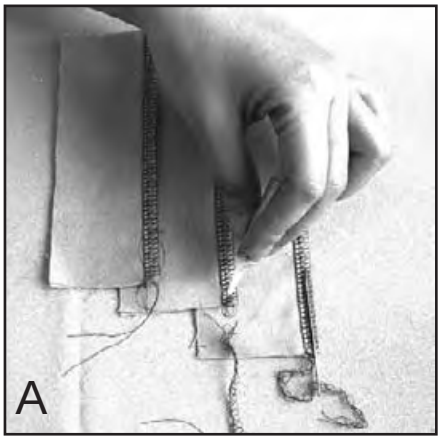
Place two layers of fabric right sides together. Use the marks on your serger's front cover to align the fabric for the desired seam width. Keep your eye on the fabric edge to guide it to the appropriate mark (fig. B).

Do not watch the needle. If you guide the fabric accurately, the needle will seam in the correct place automatically.



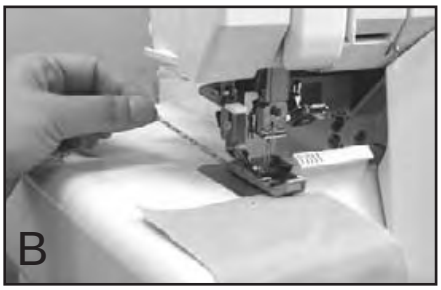
Note: For most seaming, pins are unnecessary because the serger feeds the fabric evenly. If you need pins, place the pins parallel to the seam line outside the seam allowance to avoid damaging the blades.

Securing Ends

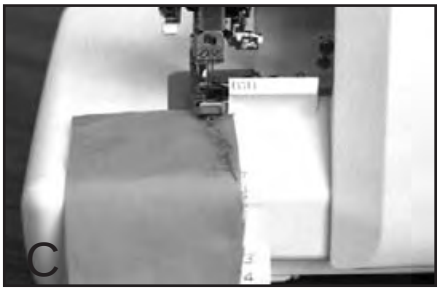


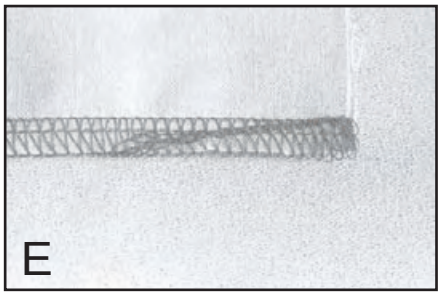
The serger stitch will not unravel readily, and in most cases serged seams are secured by an intersecting seam.
If that's not the case, these are several options for securing seam (fig. A).

1. Leave a 3 inch (7.5cm) chain, separate the threads and tie a knot.
2. Apply a dot of seam sealant on the thread chain at the fabric edge. Allow to dry and cut off the excess thread chain.
3. Leave a 3-4 inch (7.5-10cm) thread chain and use a large-eye tapestry needle or double-eye needle to weave the chain back into the stitching.
4. Lock the beginning or end of a seam by serging over the previous stitches.



To lock the beginning of the seam:
1. Manually turn the handwheel toward you taking 2-3 stitches into the fabric. Leave the needle(s) in the lowest position to anchor the fabric.
2. Raise the presser foot.
3. Smooth out the thread chain with your fingers (fig. B). Then bring the chain around and under the foot, so that it aligns with the edge of the fabric (fig. C).
4. Lower the foot and continue sewing, catching the thread chain in the stitches for about 1inch (2.5cm). Let the blades cut off any remaining thread chain (fig. D-E).

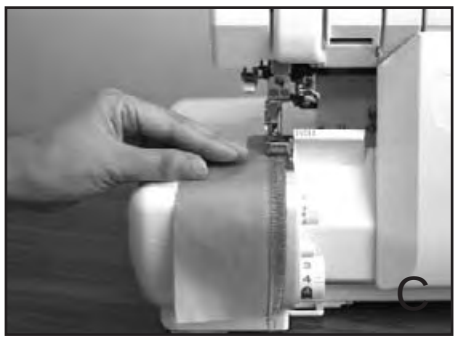


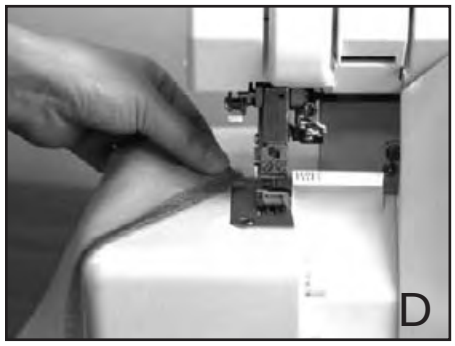


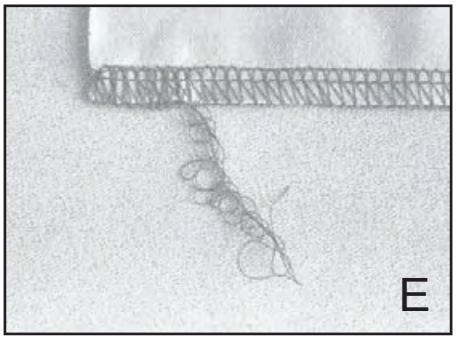
Securing Ends (Cont.)

To lock the end of the seam:

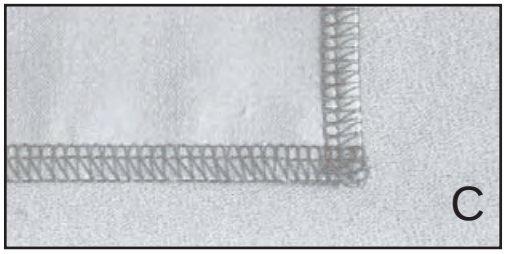
1. Take one stitch off the end of the seam (fig. A).
2. Raise the presser foot and bring the needle(s) to the highet position. Pull back gently on the fabric to clear the stitch fingers.
3. Turn the fabric over with the wrong side of the stitch facing up(fig. B), and reposition it under the presser foot with the needle at the seam edge, aligned with the previous needle line (fig. C).
4. Lower presser foot and sew 5-6 stitches over the previous stitches, being careful not to cut them. You may want to flip the cutting blade lock switch clockwise to the lock position. Pivot the fabric and chain off, (fig. D-E).







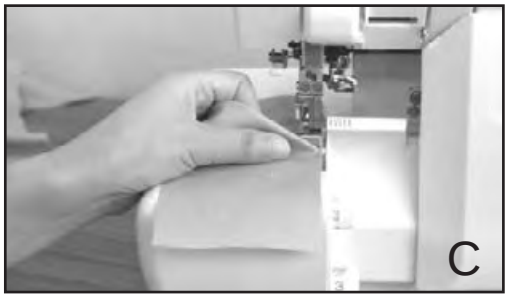
Turning Outside Corners



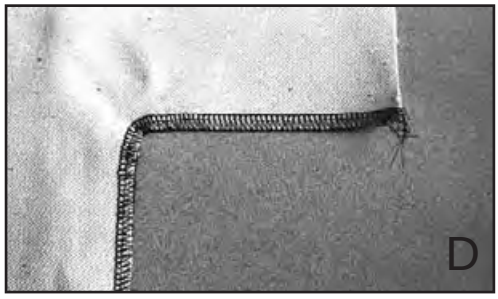
1. Stitch along one edge until you reach the corner. Take one stitch off the edge of the fabric (fig. A). (As you approach the edge, you may want to stop and manually turn the handwheel towards you.)
2. Raise the needle(s) to the highest position.
3. Clear the stitch fingers, and rotate the fabric to reposition the needle at the previous row of stitching (fig. B). Gently pull up on all threads to remove slack and resume stitching (fig. C).

Note: A loose thread loop at the corner is caused by too much slack in the needle thread when clearing the stitch fingers. Try again, turning corners takes a little practice!

Turning Inside Corners



1. Reinforce loosely woven fabrics at the corner with staystitching on the conventional sewing machine. Clip to the corner (fig. A).
2. Align the fabric edge with the blade, and stitch until the blade reaches the corner, not the needles. Don't cut into the corner (fig. B).
3. Lower the needle(s) to anchor the fabric.
4. Raise the presser foot and straighten out the fabric, forming a pleat at the corner (fig. C).
5. Be sure the marked stitching line is straight, then continue serging the remaining edge. When done correctly, the pleat will disappear after stitching (fig. D).

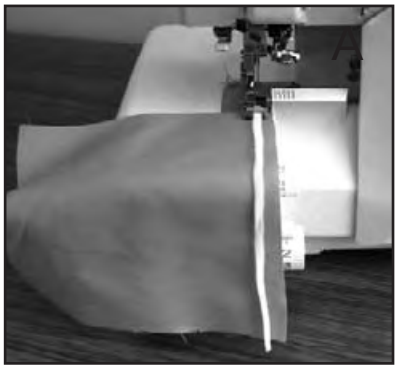


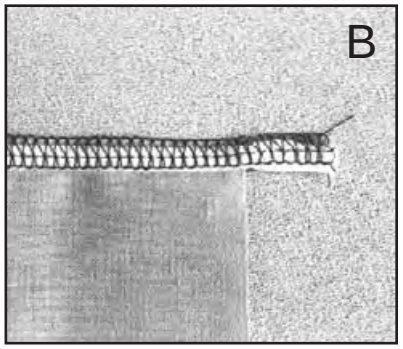
Serging Curves

To serge around inside or outside curves, guide the fabric into the cutting blade, not the needle(s). Remember, cutting takes place before the fabric reaches the needle. Because the long serger presser foot holds the fabric more securely, you may need to raise and lower the presser foot several times to mane uver around very tight curves.

Inserting Tapes

The slot in the standard presser foot is designed to guide stabilizing tape, narrow elastic or decorative ribbon into the stitching. Insert tape or elastic into the slot and under the back of the foot (fig. A). Adjust the stitch width to match the tape width. Place the fabric under the foot and stitch (fig. B).





Using Specialty Threads

Beautiful stitches can be formed by serging with specialty threads, cords and ribbons. These heavier or shinier threads can be used to enhance appearance, add strength or elasticity, or create special effects, depending on the thread you choose.

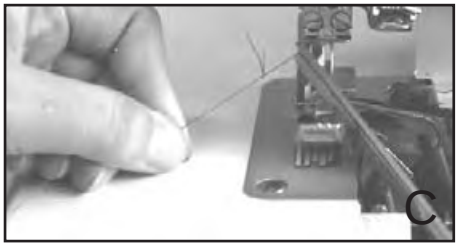
Some specialty threads work well through the needle and loopers. There are some that are too heavy for the needle and should only be used in the loopers.

Use the Specialty Thread chart on pages 46 and 47 as a guide keeping in mind that the threads can vary from one manufacturer to another. It is best to sew test for best results.

Threading Lightweight Thread

Specialty thread used in the needle can be threaded in the usual way. The ease with which they can be threaded in the loopers, however, depends on thread thickness.

Changing Threads



1. Clip the existing thread at the cone and remove the cone from the spindle (fig.A).
2. Place the new cone on the spindle. With the two threads together, tie and overhand knot, or square knot (fig.B).
3. Raise the presser foot, and pull the old thread from under the foot until the new thread comes through the machine.

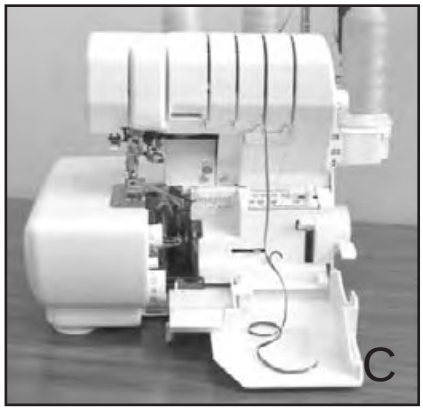
Note: When changing a needle thread, pull the thread through until it reaches the needle eye. Then clip off the knot (fig.C) and rethread the needle eye manually or with the needle threader.

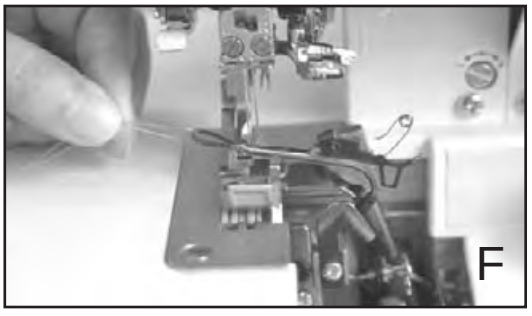
Threading Mediumweight Thread

Mediumweight threads, including topstitching thread, Decor rayon and stretch nylon thread, are too bulky to form a knot that would fit through the thrading port, but they can slip through the hole with the aid of a thread "cradle" made from regular serger thread.

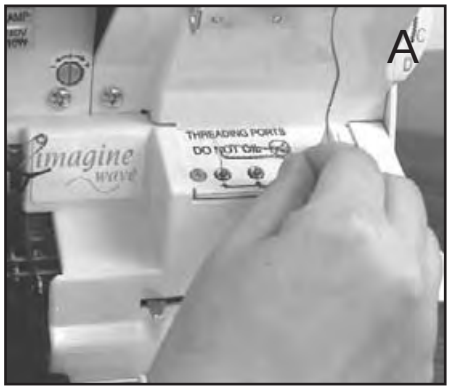
Thread Cradle

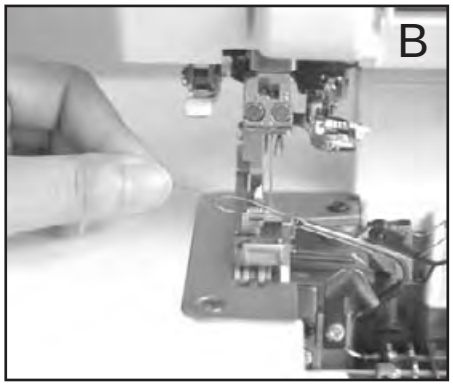
1. Open the front cover and raise the presser foot.
2. At the threading port, clip the looper thread that is to be replaced. (fig.A) Remove thread from under the foot and the upper thread guides. Replace cone of thread with specialty thread.
3. With machine in locked position (fig.B) set the looper threading port to U or L, according to the looper that is being threaded.
4. Thread specialty thread into the upper thread guides, leaving an 18 inch (40cm) tail above the threading port. (fig.C)
5. Cut a 24 inch (55cm) strand of serger thread and fold in half to form a thread cradle. Insert the loose ends of the thread cradle into the port about 1 inch (2.5cm).
6. Holding the cradle loop with left hand, depress the threading lever with your right hand (fig.D) until the thread ends come out the looper eye.
7. Insert the specialty thread tail into the cradle loop (fig.E), pull the serger thread ends until the specialty thread comes through the looper eye (fig.F). Discard or set aside the thread cradle.
8. Run upper looper thread under the foot and to the left, cut lower looper thread to 4 inches (10cm) and leave it hanging loose.





Looper Threading Tool





1. Open the front cover and raise the presser foot.
2. At the threading port, cut the looper thread that is to be replaced. Remove thread from under the foot and the upper thread guides. Replace cone of thread with specialty thread.
3. With machine in locked position set the looper threading port to U or L, according to the looper that is being threaded.
4. Thread specialty thread into the upper thread guides, leaving an 18 inch (40cm) tail above the threading port.
5. Place the straight end of the looper threading tool into the threading port. Push the looper threading tool until the end comes out of the looper eye.
6. Insert the specialty thread tail into the looper threading tool eye (fig.A). Pull the straight end of the looper threading tool through the looper eye bringing the specialty thread with it. (fig.B)

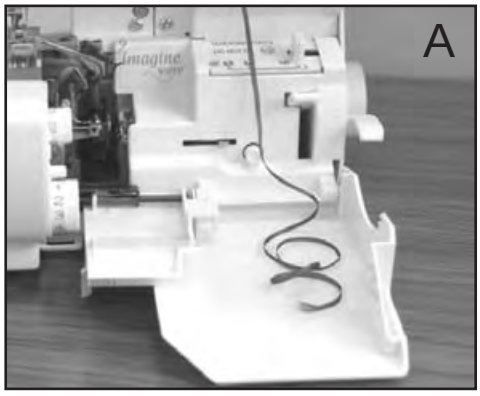
Bypassing the Threading Port

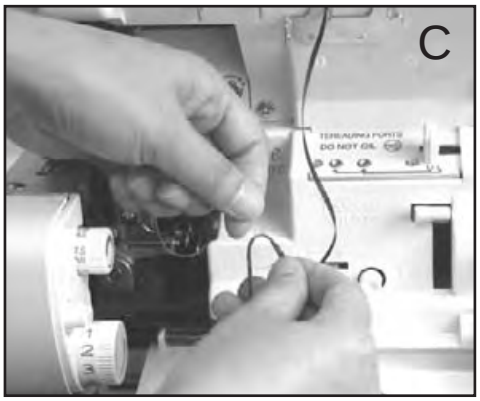
Heavyweight threads can be used through your regular looper thread paths. Specific techniques may require that the thread bypass the thread port for the thread pull to be loosened. Start with the machine threaded with regular serger thread.

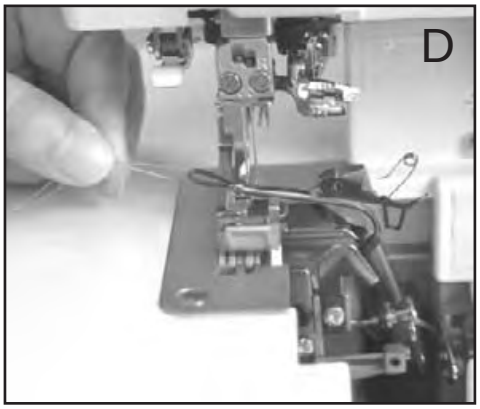
1. Open front cover and raise the presser foot.
2. Just above the threading port, clip the looper thread to be replaced. Pull the thread out of the upper guides and remove the cone.
3. Place the specialty thread on the spool pin. Thread it into the upper guides and clip it a couple of inches beyond the base plate (fig. A).
4. With machine lock button released, use the tweezers to pull the existing looper thread out of tube extending from the threading mechanism (fig. B). Leave the thread in the looper arm.
5. Tie the specialty thread onto the regular thread with an overhand knot (fig. C). Pull on the regular thread from the looper eye until the specialty thread comes through the looper eye.
6. Place upper looper thread under the foot and to the left: clip lower looper thread at the base plate.

If the thread is heavy and the overhand knot (step #5) is too large for the looper tube, follow directions #1 thru #6 on page 43 to make a thread cradle. Then:

1. Release machine lock button.
2. While holding the loose ends of the thread cradle with one hand, use the tweezers to pull the cradle loop out of the tube extending from the threading mechanism with the other hand.
3. Insert 2 inch(5cm) of your decorative thread into the cradle loop. Pull on the loose ends of the thread cradle from the looper eye until the specialty thread comes through the looper eye.







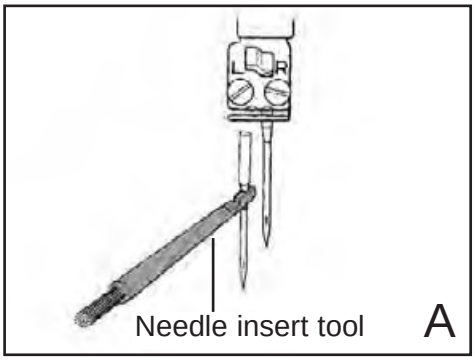
Specialty Thread Guide Chart

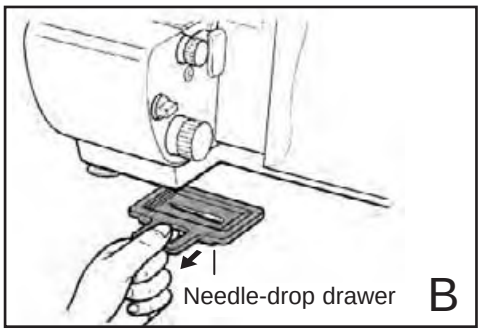
	Topstitching Buttonhole Twist	Woolly Nylon Thread	Machine Embroidery Metallic Threads
APPLICATION	Edging or flatlock seaming for sportswear and home décor items.	Soft stretchy seams on lingerie, swimwear, active wear, and for rolled edge stitch.	Decorative edges for clothing, gift items, home décor, etc.
4-Thread Seaming	Yes	Yes	Yes For exposed edges only
3-Thread Seaming	Yes	Yes	Yes For exposed edges only
2-Thread Flatlock	Yes	Yes	Yes In lower looper
4-Thread Edging	Yes	Yes	Yes
3-Thread Edging	Yes	Yes	Yes
3-Thread Rolled Edge	Use in upper looper only	Yes	Use in upper looper only
3-Thread Wave	In upper or lower looper. Or both loopers	In upper or lower looper. Or both loopers	In upper or lower looper. Or both loopers
3-Thread Rolled Wave	Use in upper looper only	In upper or lower looper. Or both loopers	In upper or lower looper. Or both loopers
Blanket Stitch	In needle only	In lower looper	Not recommended
Ladder Stitch	In needle only	In lower looper	In needle only
COMMENTS	When using decorative thread in the needle use a size 90 Top Stitch needle for best results.	Can be used in the needle	Varies greatly with manufacturer. Avoid thread with coarse metal fibers. Sew test before sewing on project.

Specialty Thread Guide Chart

	Clear Nylon Monofilament	Machine Embroidery Threads: Rayon and Polyester, 30, 40, 50 weight. Lingerie Thread	Designer 6 Pearl Crown Rayon Candlelight Jeans Stitch Ribbon Thread
APPLICATION	Techniques requiring the thread to be invisible such as blindhemming	Lingerie and lightweight fabrics, edging of fine fabrics, delicate rolled hems.	Decorative edging, flatlocking, rolled hem, wave stitch, rolled wave stitch, etc.
4-Thread Seaming	Not recommended	Lingerie thread for seams.	Not recommended for seaming
3-Thread Seaming	Blindhemming	Lingerie thread for seams.	Not recommended for seaming
2-Thread Flatlock	Blindhemming	Lingerie thread for seams.	Use in the lower looper
4-Thread Edging	Not recommended	Machine embroidery thread only.	Use in the upper and lower loopers.
3-Thread Edging	Not recommended	Machine embroidery thread only.	Use in the upper and lower loopers.
3-Thread Rolled Edge	Lengthen stitch slightly	Machine embroidery thread in upper looper	Use in the upper looper only
3-Thread Wave	Not recommended	Machine embroidery thread in the upper and lower loopers.	Use in the upper looper or lower looper. Not both loopers at once.
3-Thread Rolled Wave	Not recommended	Machine embroidery thread in the upper looper.	Use in the upper looper only
Blanket Stitch	Not recommended	Not recommended	Use in the needle only with a size 90 Top Stitch needle
Ladder Stitch	Not recommended	Not recommended	Use in the needle only with a size 90 Top Stitch needle
COMMENTS	Make sure to use a soft pliable monofilament thread Sew at a slower speed.	Use thread nets to prevent the thread from falling off the spool and getting tangled.	Be sure to check the recommendations above for best results. Sew test before applying to the project.

Replacing Needles

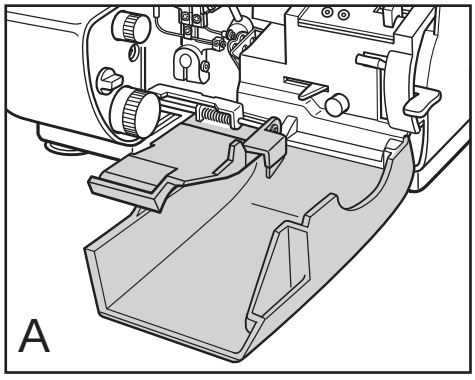


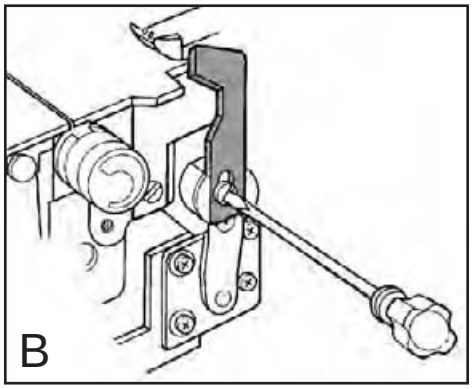


1. Raise the needle to the highest position by turning the handwheel toward you.
2. Using the screwdriver from the accessory pouch, loosen the needle screw for the needle to be changed. "L" screw for the left needle and "R" screw for the right needle as show in illustration A. Note: To prevent the needle from falling into the needle plate, hold it with the needle insert tool as you loosen the needle screw. (fig.A)
3. Use the needle insert tool or tweezers to insert the new needle with the flat side to the back. Insert the needle as far as it will go. Check the needle viewing window. (fig.A)
4. Tighten the needle screw.

Note: If you do drop a needle down into the machine just pull out the needle-drop drawer at the bottom of the serger. The needle will be on the drawer. (fig.B)

Replacing Cutting Blades





The fixed blade is made of a special long lasting steel and does not require frequent replacement. If necessary, contact your nearest Baby Lock retailer for replacement of the blade.

The upper moving blade is made of a softer steel material and will require replacement. A spare blade is provided with the machine for replacement if necessary. The spare blade is located on the thread spool stand accessory compartment.

If for some reason your machine does not cut or perform as it should, please take your machine to your nearest Baby Lock retailer. It is possible that the result of poor cutting may indicate other problems.

TO REPLACE MOVING BLADE follow directions below.

1. For safety reasons, unplug main power cord.
2. Open front cover and cutting blade cover (fig. A):
3. Remove screw and moving blade (fig. B).
4. Insert new blade into blade slot.
5. Insert screw and place moving blade to its highest position.
6. Hold blade in place and tighten screw.
7. Check and make sure that the top section of cutting blade is set below the fixed blade when moving blade is in its lowest position.
8. Close cutting blade cover and front cover.

Cleaning

Your Baby Lock will operate at best performance if it is kept clean at all times. The serger's cutting action creates much more lint than you will find on conventional sewing machine.

Your serger's major moving parts are well protected and do not need to be oiled.
However, we recommend to use the cleaning brush often during garment construction in order to keep lint off the blades, the needle bar, the feed dog mechanism and loopers. If machine needs to be oiled, check with your nearest Baby Lock retailer for use of high grade recommended sewing machine oil.

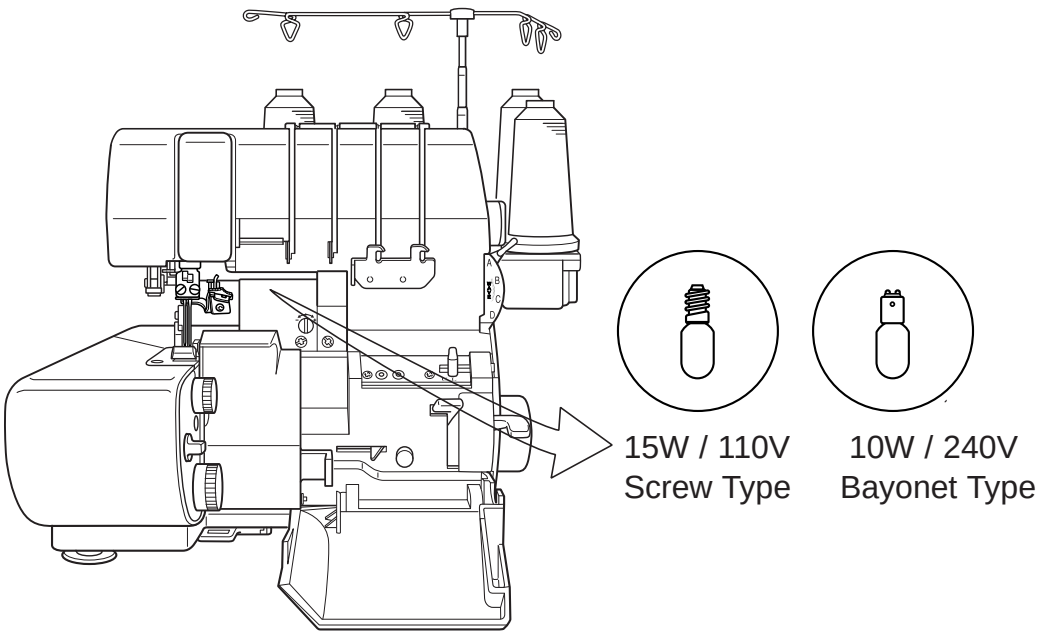
TO REMOVE NEEDLE PLATE PROCEED AS FOLLOW:

1. For safety reasons, unplug main power cord.
2. Raise and remove presser foot.
3. Select stitch length dial to rolled hem setting.
4. Remove needles from needle clamp.
5. Turn your handwheel until the upper looper is in the far right position.
6. Remove the needle plate. Remove front screw with screwdriver and back screw with allen wrench.
7. With your right hand, first raise the needle plate in front of the blade. Pull slightly to the right, then remove to the left.
8. Replace in reverse procedure.

Replacing Light Bulb

1. For safety reasons, unplug main power cord prior of replacing light bulb.
2. Open front cover and cutting blade cover.
3. Remove light bulb and replace bulb with the same type rated (15watts/120volts or 10watts/230volts). See below draft for reference.

Note: Use the Bulb Remover Tool to easily extract the light bulb from your machine.
The Bulb Remover Tool - Part B7525-01A (262011) can be purchased at your Baby Lock retailer.



Troubleshooting

Before taking your machine in for service, check the following:

Machine fails to start:
1. Are electrical plugs properly connected?
2. Is the power switch on?
3. Check household circuit breaker or fuse.
4. Is the lock button release lever in the unlocked position?

Thread breaks:
1. Is the machine threaded correctly? Check each thread path carefully.
2. Is the needle inserted correctly?
3. Is the needle bent and worn?
4. Is the stitch selector on the proper setting?
5. Are you using good quality thread?
6. Is the thread feeding off the cone/spool freely?
7. Is the needle size correct for the type of fabric being used?
8. Are the needles being used the correct Schmetz or Organ HAx1SP/CR system?

Skipped Stitches:
1. Is the needle bent or worn?
2. Is the needle inserted correctly?
3. Is the serger threaded correctly?
4. Is the presser foot pressure right for the fabric?
5. Is the correct needle being used for the particular stitch?
6. Is the correct needle being used for the type of being sewn fabric?
7. Is the fabric being pulled from the rear of the machine while sewing?

Fabric will not feed in machine:
1. Is the machine lock button released?
2. Is the presser foot down?
3. Are the cutting blades sharp?
4. Are the cutting blades, presser foot, and feed dogs free of lint?
5. Are the cutting blades properly set and is the upper blade against the lower blade?
6. Is the presser foot pressure right for the fabric?
7. Is the stitch length set properly?
8. Is the needle plate secure on the machine?

Stitch is Unbalanced:
1. Is the serger threaded correctly?
2. Is the stitch selector on the proper setting?
3. Is the thread well seated in the thread slots?
4. Is the looper thread fine-tuning screw positioned correctly?

Note: If you change the position of the looper thread fine-tuning screw and stitch is unbalanced, return the screw to the standard position and recheck the stitch.(See page 13 for illustration.)

Troubleshooting Continued

Needle threading difficulties:
1. Is the needle threader selector at the appropriate setting?("R" for right needle, "L" for left needle.)

Looper threading difficulties:
1. Is the looper threader selector at the appropriate setting?(Left threading port for "U" upper looper, right threading port for "L" lower looper.)
2. Is the thread end in the proper threading port?
3. Is at least 1 inch (2.5cm) of the thread end in the threading port?
4. Is there at least 18 inches (40cm) of loose thread beyond the thread guide above the threading port?
5. Is there a kink or twist in the 18 inch (40cm) of thread to restrict the flow into the threading port?
6. Is the thread caught to prevent going through the loopers?

Poor Cutting:
1. Are the cutting blade(s) dull?
2. Have you sewn over a straight pin?
3. Is the cutting blade in the locked position?
4. Have the cutting blades been improperly replaced?
5. Is the fabric being pulled from the rear of the machine while sewing?

Wave Stitch is not formed:
1. Is the machine threaded correctly? Check each thread path carefully.
2. Is the machine set for 3-Thread Wave sewing?
3. Is the Wave Selector shows "W"?
4. For rolled wave edging, is the stitch length dial set for "ROLLED HEM" ?
5. Is the Stitch Selector set correctly? Set the Stitch Selector at "B" for 3-Thread Wave Stitch or "C" for 3-Thread Rolled Wave Stitch.

Dos and Don'ts

1. Always be aware of the needle's up-and-down movement, and do not turn your attention from the machine while it is running.
2. When changing the needle, the presser foot or any other parts, always disconnect the machine by turning the power switch to OFF.
3. Do not place anything on the foot controller, or the machine will start inadvertently and the controller or motor can be burn out.
4. The maximum permissible power for the light bulb is 15W/110V, or 10W/240V over 200 voltage country.
5. When using your serger for the first time, place a fabric scrap under the presser foot and run the machine without thread for a few minutes. Wipe away any oil that appears.
6. Do not pull fabric from the rear of the machine. Such action can damage the looper mechanism.
7. To prevent possible injury, always avoid body contact with any moving parts and the machine mechanism.
8. NEVER sew over pins.

Special Caution: Unplug the power cord from the electrical outlet when the machine is not in use.

Technical Data

Stitch Types:	2 needles, 2 loopers: 4-Thread Overlock 1 needle (left or right), 2 loopers 3-Thread Overlock (wide, narrow, and narrow hem) 3-Thread Flatlock (wide and narrow) right needle only 3-Thread Rolled Edge 3-Thread Wave 3-Thread Rolled Wave 1 needle (left or right), 1 looper 2-Thread Flatlock (wide and narrow) 2-Thread Blanket Stitch 2-Thread Ladder Stitch
Stitch Width:	Stitch Width Standard 2/3/4 - thread with left needle: 5.0 - 7.5mm Standard 2/3/4 - thread with right needle 3-Thread Wave Stitch with right needle 3.0 - 5.5mm 3-Thread Rolled Edge 1.5mm
Stitch Length:	Stitch Length: 2/3/4 Thread Overlock Stitch: 1-4mm 3-Thread Rolled Edge: 1-4mm
Differential Feed:	Gathering effect: N-2 Stretching effect: N-0.6
Presser Foot:	Snap-on E-line feet
Handwheel:	Rotates forward
Needle System:	Schmetz or Organ HA x 1SP/CR
Sewing Speed:	Up to 1500 s.p.m
Machine Weight:	7.5 kg
Light Bulb:	15W/110V or 10W/240V (Blue bulb)

Chart for Stitch Selection Settings

Stitch Type	Stitch Length	Stitch Width	Needle	Stitch Selector	Differential Feed	Wave Selector	Page
4-Thread Overlock	2.5-3.5	6.0-7.5	Left + Right	A	N	O	19
4-Thread Gatherring	4	6.0-7.5	Left + Right	A	2.0	O	19
3-Thread Overlock Wide	2-3	7.5	Left	A	N	O	20
Narrow	2.5-3.5	3.0	Right	B	N	O	21
3-Thread Narrow Hem	1-1.5R	3.0-4.0	Right	C	N-0.6	O	22
3-Thread Rolled edge	1.5R	3.5	Right	D	N-0.6	O	23
3-Thread Flatlock	2-3	3.0-5.0	Right	D	N	O	24
2-Thread Flatlock Wide	2-2.5	7.5	Left	A	N	O	26
Narrow	3-3.5	3.5	Right	B	N	O	27
3-Thread Wave Stitch	1-2.5	5.0	Right	B	N	W	34
3-Thread Rolled Wave	1-1.5R	3.0-5.0	Right	C	N	W	35

This change indicates the suggested range of settings for each stitch category. Make adjustments to the stitch length and width settings according to fabric weight and thread type.

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